

**ANALISA HASIL PERBANDINGAN PERINGKASAN TEKS OTOMATIS  
UNTUK BERITA ONLINE MENGGUNAKAN METODE  
*TERM FREQUENCY- INVERSE DOCUMENT FREQUENCY*  
DENGAN CORPUS DAN NON CORPUS  
(STUDI KASUS *BBC MAGAZINE ONLINE*)**

Skripsi

untuk memenuhi sebagian persyaratan  
mencapai derajat Sarjana S-1  
Program Studi Teknik Informatika



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*Assalamu'alaikum wr. wb.*

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**Analisa Hasil Perbandingan Peringkasan Teks Otomatis Untuk Berita Online Menggunakan Metode Term Frequency– Inverse Document frequency Dengan Corpus Dan Non Corpus  
(Studi Kasus Bbc Magazine Online)**

**Aditya Dwi Putra**  
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**INTISARI**

Perkembangan teknologi internet mengakibatkan banyaknya website, termasuk website dengan penyajian artikel panjang seperti majalah online. Dengan dibuatnya sistem peringkasan otomatis ini, diharapkan dapat membantu mengurangi waktu membaca keseluruhan isi artikel, sehingga dapat mempercepat membaca majalah online tanpa kehilangan makna bacaan.

Penelitian ini akan fokus pada perbandingan penerapan metode *tf-idf* dengan menggunakan corpus stopwords dan tanpa corpus stopwords. Prosesnya diawali dengan proses pre-processing I, yaitu proses web scraping dimana dimulai dari download teks dari server website, sampai dengan filterisasi teks untuk mendapatkan teks yang normal. Langkah selanjutnya adalah pre-processing II, yaitu proses teks processing yaitu memproses teks untuk mendapatkan term kata. Proses ini terdiri dari case folding, pemecahan kalimat, tokenization, filtering stopwords. Namun bila menggunakan pendekatan yang tanpa menggunakan filtering stopwords maka hanya terdapat proses pemecahan kalimat dan tokenization. Hasil dari proses ini kemudian dihitung bobot *tf-idf*. Untuk menghasilkan ringkasan dilakukan proses ekstraksi kalimat yang mempunyai nilai *tf-idf* tinggi.

Data pengujian menggunakan teks dari *bbc magazine online*. Pengujian dilakukan dengan 2 cara, pertama membandingkan hasil ringkasan sistem dengan ringkasan manual (*abstractor*). Kedua dengan kuisioner terhadap responden untuk menilai hasil ringkasan. Hasil dari evaluasi sistem yang menggunakan filtering corpus dengan ringkasan manual menghasilkan akurasi 47,50% (dengan standard deviasi 6,9 dan rentang nilai antara 41,66% sampai dengan 56,25%). Sedangkan hasil evaluasi sistem yang tidak menggunakan filtering stopwords dengan ringkasan manual menghasilkan akurasi 45,46% (dengan standard deviasi 6,2 dan rentang nilai antara 36,84% sampai dengan 50,00%). Serta hasil pengujian dengan responden menghasilkan responden sangat setuju sebanyak 4%, setuju sebanyak 72%, netral sebanyak 23,2%, yang menyatakan tidak setuju sebanyak 0,8% dan yang menyatakan sangat tidak setuju sebanyak 0%.

Kata Kunci : Peringkasan Teks Otomatis, *tf-idf*, *web data extraction*, *pemrosesan teks*

**Comparison Of Analysis Results Automatic Text Summarization For News  
Online Using Term Frequency– Inverse Document Frequency  
With Corpus And Non Corpus  
(Case Study Bbc Magazine Online)**

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**ABSTRACT**

Development of Internet technology results the presence of many websites, including the website of a long article such as magazine online. This establishment of automatic text summarization expected to help reducing the time to read the entire contents of the article, so people can speed up read online magazines without losing the meaning of article

This research begins with the preprocessing 1, including web scraping process which starts from text downloading from the website server until filtering text to get the normal text. The next step is pre-processing II, including text processing whose aim to get the word term. These processes consist of case folding, sentence splitting, tokenization and filtering stop words. However, if using the approach without the use of filtering stopwords then there are only sentence splitting and tokenization process. The results of this processes were then calculated its weight tf-idf. To generate a summary, the researcher does sentence extraction process whose high value of tf-idf.

Data testing is using article from the bbc magazine online. Testing is done in two ways. Firstly, the researcher compares the result of system summary with the result of manual summary (from abstractor). Secondly, the data testing is using questionnaires to the respondents to assess the summary result. The results of the evaluation system that uses filtering corpus generate a summary with 47.50% accuracy (with standard deviation of 6.9 and a range of values between 41.66% to 56.25%). While the results of the evaluation system that does not use stopwords filtering produces 45.46% accuracy (with standard deviation of 6.2 and a range of values between 36.84% to 50.00%). Meanwhile, the result of the second testing using respondents, in general, it can be concluded that produces 4% of respondents strongly agreed, 72% agreed, 23.2% neutral, 0.8% disagreed, and stated strongly disagree 0%.

*Key words : automatic text summarization, tf-idf, web data extraction, text processing*

## BAB I

### PENDAHULUAN

#### 1.1 Latar Belakang

Banyaknya informasi khususnya di dunia maya, mengalami perkembangan yang sangat pesat. Khususnya artikel-artikel online yang tersebar di Internet. Para pengguna Internet dimanjakan dengan informasi yang sangat melimpah, namun kebanyakan informasi yang ada di Internet cenderung bertele-tele dalam menampilkan berita dan banyak informasi yang tidak penting yang ada di dalamnya. Sangat penting dibuatkan sistem yang bisa meringkas teks dalam website, sehingga dapat mempercepat pengguna Internet dalam membaca berita dan memahami isinya.

Peringkasan teks otomatis (*automatic text summarization*) adalah pembuatan bentuk yang lebih singkat dari sebuah teks dengan memanfaatkan aplikasi yang dijalankan dan dioperasikan pada komputer. Ringkasan adalah teks yang dihasilkan dari sebuah teks atau banyak teks, yang mengandung isi informasi dari teks asli dan panjangnya tidak lebih dari setengah teks aslinya (Hovy, 2001). Ringkasan dibutuhkan untuk mendapatkan isi artikel secara ringkas

Banyak metode peringkasan teks otomatis yang bisa digunakan untuk menghasilkan ringkasan yang baik. Berbagai pendekatan pula dapat digunakan untuk membuatnya. Penelitian ini akan menggunakan pendekatan secara statistik dengan menggunakan metode *Terms frequency-Inverse Document*

*Frequency*. Penelitian ini akan fokus dengan membandingkan antara metode *Terms frequency-Inverse Document Frequency* dengan menggunakan corpus dan *Terms frequency-Inverse Document Frequency* tanpa *filtering corpus*. Dalam penelitian ini corpus yang digunakan adalah *corpus stopwords* yang berisi kumpulan kata-kata umum dalam Bahasa Inggris.

*Terms Frequency (TF)* merupakan pengukuran frekuensi munculnya kata dalam suatu dokumen. Dalam peringkasan *single document*, nilai *term frequency* diperoleh dari frekuensi munculnya kata dalam kalimat. *TF* dikombinasikan dengan *Inverse Document Frequency (IDF)* untuk mencari sejumlah dokumen yang paling relevan.

*Inverse Document Frequency (IDF)* merupakan pengukuran frekuensi kemunculan suatu kata dalam sekumpulan dokumen. Perhitungan dilakukan dengan mengkalkulasi total dokumen dalam koleksi dibagi dengan jumlah frekuensi dari *term* diseluruh dokumen.

Berdasarkan masalah-masalah yang telah dijelaskan di atas, maka peneliti akan melakukan penelitian dengan fokus utama pada perbandingan hasil ringkasan antara *tf-idf corpus* dan *non corpus*. Diharapkan dengan dilakukan penelitian ini akan diketahui mana akurasi yang terbaik dari metode *tf-idf* dengan *corpus* atau tidak menggunakan *corpus*

## 1.2 Rumusan Masalah

Berdasarkan latar belakang di atas, maka terdapat beberapa rumusan masalah sebagai berikut:

1. Bagaimana menghasilkan perangkat lunak yang dapat melakukan peringkasan pada *main content website* dengan menerapkan metode *term frequency-inverse document frequency*?
2. Bagaimana menghasilkan ringkasan yang bisa mewakili isi dari berita di dalam artikel website?
3. Bagaimana membandingkan tingkat keakurasian metode *term frequency-inverse document frequency* dengan corpus dan tanpa corpus?

## 1.3 Batasan Masalah

Ruang lingkup permasalahan yang dibatasi dalam penelitian ini adalah:

1. Penelitian ini menggunakan bahasa Inggris sebagai input aplikasi.
2. Peringkasan teks dibatasi yaitu untuk satu halaman website.
3. Perangkat lunak membutuhkan koneksi internet dalam pengoperasiannya.
4. Bahasa Pemrograman yang digunakan untuk membangun perangkat lunak adalah *Python*.
5. Framework yang digunakan untuk memproses teks adalah *NLTK (Natural Language Toolkit)*.
6. Tidak menangani kesalahan penulisan kata dalam artikel.

#### 1.4 Tujuan Penelitian

Berdasarkan latar belakang dan rumusan masalah yang telah dipaparkan diatas maka dapat disusun tujuan penelitian sebagai berikut:

1. Menganalisa perbandingan hasil metode *term frequency-inverse document frequency* dengan corpus dan tanpa corpus pada kasus peringkasan teks otomatis dokumen tunggal.
2. Membangun suatu perangkat lunak yang bisa meringkas *main content website* dan bisa mewakili isi dari keseluruhan berita.

#### 1.5 Manfaat Penelitian

Adapun manfaat yang diambil dari penelitian ini adalah :

##### A. Bagi Peneliti

Bagi peneliti, manfaat yang dirasakan dari penelitian ini yaitu menambah ilmu dan wawasan tentang bagaimana membangun aplikasi yang melakukan pengolahan data-data teks.

##### B. Bagi Peneliti Selanjutnya

Bagi peneliti selanjutnya, semoga penelitian ini dapat dikembangkan lagi dengan penambahan fitur-fitur dan juga algoritma yang berbeda. Penelitian selanjutnya dapat menyempurnakan penelitian yang sekarang dimana sistem dapat meringkas semua halaman website. Penelitian selanjutnya juga bisa menambahkan pendekatan-pendekatan yang lain untuk melakukan peringkasan berita.

## **1.6 Keaslian Skripsi**

Penelitian yang berhubungan dengan Peringkasan Teks Otomatis Untuk Berita Online di Fakultas Sains dan Teknologi Universitas Islam Negeri Sunan Kalijaga Yogyakarta belum pernah dilakukan. Selain itu penulis juga belum menemukan penelitian sejenis di Kota Yogyakarta.

## **1.7 Sistematika Penulisan**

Untuk memberikan gambaran dan kerangka yang jelas mengenai pokok bahasan dalam setiap Bab dalam penelitian ini, maka diperlukan sistematika penulisan. Berikut gambaran sistematika penulisan pada masing-masing Bab:

### **Bab I : Pendahuluan**

Bab ini berisi latar belakang masalah, rumusan masalah, batasan masalah, tujuan penelitian, manfaat penelitian, keaslian skripsi, dan sistematika penelitian.

### **Bab II : Tinjauan pustaka dan Landasan Teori**

Bab dua menjelaskan tentang tinjauan pustaka dan landasan teori yang berhubungan dengan permasalahan penelitian yang akan dibahas.

### **Bab III : Metode penelitian**

Bab ini akan membahas tentang metode dari penelitian yang akan dilakukan serta alur penelitian.



**Bab IV : Hasil dan Pembahasan**

Meliputi hasil yang dicapai dari perancangan aplikasi sampai implementasi aplikasi sehingga dapat ditarik suatu kesimpulan.

**Bab V : Penutup**

Berisi kesimpulan dan saran berdasarkan hasil yang telah dicapai sehingga dapat digunakan sebagai bahan pertimbangan bagi pihak-pihak yang berkepentingan serta kemungkinan pengembangannya.

## BAB V

### KESIMPULAN DAN SARAN

#### 5.1 Kesimpulan

Kesimpulan yang didapat setelah dilakukan penelitian ini adalah bahwa pada kasus peringkasan teks otomatis dokumen tunggal, penerapan metode *term frequency-inverse document frequency* dapat dilakukan dengan *filtering corpus stopwords* dan tanpa *filtering corpus stopwords* dengan hasil yang tidak terlalu berbeda. Namun tetap menggunakan *filtering corpus stopwords* memiliki akurasi yang lebih baik dari pada tanpa *filtering corpus*. Dengan menggunakan *filtering stopwords* rata-rata hasil keakuratan 47,50 % (dengan standard deviasi 6,9 dan rentang nilai antara 41,66 % sampai dengan 56,25 %) dibandingkan dengan ringkasan *abstractor*. Sedangkan tanpa *filtering corpus stopwords* menghasilkan rata-rata hasil keakuratan 45,46 % (dengan standard deviasi 6,2 dan rentang nilai antara 36,84 % sampai dengan 50,00 %) dibandingkan dengan ringkasan *abstractor*. Selain itu dari hasil pengujian dengan user umum, dengan menjadikan tiga aspek sebagai penilaian, yaitu kemudahan untuk dipahami, makna dan keringkasan, dapat disimpulkan bahwa responden sangat setuju sebanyak 4%, setuju sebanyak 72%, netral sebanyak 23,2%, yang menyatakan tidak setuju sebanyak 0,8% dan yang menyatakan sangat tidak setuju sebanyak 0%.

## 5.2 Saran

Penelitian yang dilakukan tidak terlepas dari kekurangan dan kelemahan. Oleh karena itu, saran untuk penelitian selanjutnya diperhatikan beberapa hal, diantaranya:

1. Aplikasi bisa meringkas semua halaman website yang ada di internet.
2. Aplikasi bisa menggunakan beberapa pendekatan selain statistikal untuk menghasilkan ringkasan yang lebih baik.
3. Dapat dilakukan kombinasi antara beberapa pendekatan untuk menghasilkan ringkasan yang ideal.
4. Aplikasi tidak hanya bisa meringkas artikel majalah, namun bisa meringkas berbagai macam jenis artikel yang ada di Internet.

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## LAMPIRAN I

### A. Hasil Ringkasan Dengan Menggunakan *Filtering Corpus Stopwords*

#### 1. Ringkasan dari Risky (Penulis Wikipedia dan LPM Humaniush serta mahasiswa magang di Kedaulatan Rakyat)

##### **Has wealth made Qatar happy?**

Oil and gas have made Qatar the richest country in the world - rich enough to be ready, apparently, to spend \$200bn (£120bn) on stadiums and infrastructure for the 2022 World Cup. But has virtually limitless wealth brought the country happiness? It's still cool enough to sit outside in Qatar's capital, Doha. From desperate poverty less than a century ago, this, after all, has become the richest nation in the world, with an average per-capita income topping \$100,000 (£60,000). What's less well understood is the impact of such rapid change on Qatari society itself. You can feel the pressure in Doha. Local media report that 40% of Qatari marriages now end in divorce. More than two-thirds of Qataris, adults and children, are obese. Qataris benefit from free education, free healthcare, job guarantees, grants for housing, even free water and electricity, but abundance has created its own problems. "It's bewildering for students to graduate and be faced with 20 job offers," one academic at an American university campus in Qatar tells me. "People feel an overwhelming pressure to make the right decision." The sense is deepening that, in the rush for development, something important has been lost. Qatari family life is atomising. With children almost universally being raised by nannies brought in from the Philippines, Nepal or Indonesia, gaps of culture and outlook are opening up between the generations. Umm Khalaf, a woman in her 60s, her features hidden behind a traditional *batoola* face-mask, described to me the "beautiful simplicity" of life in her youth. "We were self-resourceful once. It's painful to lose that family intimacy," she says. Out on the dusty plains west of Doha, at Umm Al Afai - roughly, the Place of Snakes - farmer Ali al-Jehani is treating me to a tin bowl of warm, foamy camel's milk, fresh from the udder. It's the only souk I know where men go round with dustpans and brushes. "Before you could be rich if you worked and not if you didn't - it was much better," he says, swiping a soft, sweet date through the milky froth and chewing thoughtfully. "The government is trying to help, but things are moving too fast." Others echo his sense of politicians being out of step with people. Mariam Dahrouj, a journalism graduate, adjusts her niqab while speaking of a sense of threat. "People in Qatar are afraid," she says. "Suddenly all the world wants to see us. We are a closed community, and they want to come and bring their differences. How can we express our values?" Redress the balance - by, for instance, abolishing the *kafala* system that condemns migrant workers to near-slavery, or by opening Qatari citizenship to expatriates - and the fear is stability will erode and cultural values be undermined. "I didn't know about all this *kafala* stuff," one young Qatari woman told me. "And I'm feeling: why didn't we fix it before? "Have some sympathy for

Qataris," says an American academic, who has spent years in Doha. "They've lost almost everything that matters."

Jumlah ringkasan = 22

Jumlah kalimat teks sumber = 46

### **Hasil ringkasan sistem:**

#### **BBC News - Has wealth made Qatar happy?**

Oil and gas have made Qatar the richest country in the world - rich enough to be ready, apparently, to spend \$200bn (£120bn) on stadiums and infrastructure for the 2022 World Cup. In another few weeks it will be too hot and most people - those who don't have to work outside - will be retreating indoors to the comfort of air-conditioning. 'Our social and economic life has changed - families have become separated, consumption culture has taken over. From desperate poverty less than a century ago, this, after all, has become the richest nation in the world, with an average per-capita income topping \$100,000 (£60,000). Constantly snarled traffic adds hours to the working week, fuelling stress and impatience. Qataris benefit from free education, free healthcare, job guarantees, grants for housing, even free water and electricity, but abundance has created its own problems. 'It's bewildering for students to graduate and be faced with 20 job offers,' one academic at an American university campus in Qatar tells me. 'In a society where Qataris are outnumbered roughly seven-to-one by expatriates, long-term residents speak of a growing frustration among graduates that they are being fobbed off with sinecures while the most satisfying jobs go to foreigners. With children almost universally being raised by nannies brought in from the Philippines, Nepal or Indonesia, gaps of culture and outlook are opening up between the generations. Umm Khalaf, a woman in her 60s, her features hidden behind a traditional batoola face-mask, described to me the 'beautiful simplicity' of life in her youth. Out on the dusty plains west of Doha, at Umm Al Afai - roughly, the Place of Snakes - farmer Ali al-Jehani is treating me to a tin bowl of warm, foamy camel's milk, fresh from the udder. 'Before you could be rich if you worked and not if you didn't - it was much better,' he says, swiping a soft, sweet date through the milky froth and chewing thoughtfully. 'Others echo his sense of politicians being out of step with people, particularly with regard to the strenuous - and allegedly corrupt - effort made to bring the 2022 football World Cup to Qatar, and the unanticipated level of media scrutiny that has come with the turmoil of construction. Redress the balance - by, for instance, abolishing the kafala system that condemns migrant workers to near-slavery, or by opening Qatari citizenship to expatriates - and the fear is stability will erode and cultural values be undermined. As once-solid regional alliances with Saudi Arabia and other neighbours crumble, and corrosive apprehension spreads among Qataris about the impact of the World Cup - still eight years away - the government may yet find itself facing pressure to reform. 'Behind the Corniche, coffee-drinkers and

waterpipe-smokers enjoy the cool evening in the Souk Waqif market - a replica, since the original was torn down a decade ago and rebuilt to look old.

Jumlah Kalimat: 16

**Akurasi** =  $9 / 16 * 100\% = 56,25 \%$

## **2. Ringkasan dari Imam Nawawi peneliti di Lembaga Pengkajian Pembangunan Bangsa (LP2B), Yogyakarta dan penulis di CV. Bintang Media**

### **School in the cloud: Children with mentors on the other side of the world**

Five years ago, an Indian schoolboy struck up an unlikely friendship with a retired teacher in London - and with her help he is now studying to be a doctor. Even though they live thousands of miles apart and have never met, they can't imagine life without each other. When Shahrukh Khan was 13, his school in Hyderabad got a new computer lab, and it changed his life. He and his fellow pupils would get together in a small room to explore the internet but they also had a chance to chat with retired teachers in other countries. It was part of a new scheme that linked pupils with foreign mentors - the children could ask whatever they wanted and the adults on the other side of the world would offer encouragement and advice on where to find the answers to their questions. Fewings was 60 and had just retired from teaching. She lives in Hackney, east London and joined the project in 2009, after reading about it in a newspaper. They started to email each other and she began to help him with his English. His English improved in leaps and bounds. As the years passed, Khan told Fewings that he wanted to become a doctor and planned to apply to university in the UK. With Fewings' help, Khan decided that studying in England would be more expensive and more complicated than he had anticipated. He considered other countries and looked at universities in Ukraine, Russia, China and the Philippines. Fewings prompted him to think about cultural differences, the climate and living conditions in each place. After much discussion, he settled on the Philippines where he is about to start a medical degree. Khan is just one of thousands of children who have benefitted from the project, the seeds of which were sown 15 years ago, when academic Sugata Mitra gave children in a Delhi slum free access to a computer and let them use it however they wished. 'I began to suspect that reading in groups is different from reading individually,' he says. Last year, Mitra won a \$1m (£650,000) prize from the organisers of the Technology Entertainment and Design (TED) conference - he's using the money to fund the next phase, which is known as the "School in the Cloud". But the focus is not just on India - Professor Mitra has opened two computer labs in the UK, in Killingworth and Newton-Aycliffe in north-east England. The students there also have access to mentors who are known as Cloud Grannies - although many, like Fewings, are not actually grandmothers. There are



about 50 Cloud Grannies actively involved and another 50 available to help when demand grows.

Jumlah kalimat = 20

Total Kalimat Sumber = 60

### **Hasil Ringkasan Sistem :**

#### **BBC News - School in the cloud: Children with mentors on the other side of the world**

Five years ago, an Indian schoolboy struck up an unlikely friendship with a retired teacher in London - and with her help he is now studying to be a doctor. He and his fellow pupils would get together in a small room to explore the internet but they also had a chance to chat with retired teachers in other countries. It was part of a new scheme that linked pupils with foreign mentors - the children could ask whatever they wanted and the adults on the other side of the world would offer encouragement and advice on where to find the answers to their questions. 'I've got a very different viewpoint to the one that he has been exposed to so we'd laugh a bit - I tease him a little bit and he teases me - he knows if I write in capital letters that I'm shouting. As the years passed, Khan told Fewings that he wanted to become a doctor and planned to apply to university in the UK. Khan's father had died when he was just six - his eldest brother supported the family and paid his school fees but could not give him advice about applying to foreign universities. 'He was sending me flyers on the internet for colleges in Cambridge and then actually when you looked at it, it was a PO Box in a little village somewhere,' she says. So I looked up what the temperature would be in the Gobi desert [often freezing] and said, 'You live in Hyderabad why wear lots of clothes? Khan is just one of thousands of children who have benefitted from the project, the seeds of which were sown 15 years ago, when academic Sugata Mitra gave children in a Delhi slum free access to a computer and let them use it however they wished. He wanted to see if the children could teach themselves to operate it without any instruction and was amazed how quickly they gathered round the screen and worked together to pick up new concepts. Mitra saw 'that children can go well over 10 or 12 years ahead of their time using this kind of method'. Since then, he has taken his idea of self-organised learning environments (Soles) to rural parts of India too. The project provided the inspiration for the book Q&A, which in turn inspired the Oscar-winning movie Slumdog Millionaire. Last year, Mitra won a \$1m (£650,000) prize from the organisers of the Technology Entertainment and Design (TED) conference - he's using the money to fund the next phase, which is known as the 'School in the Cloud'. This is a network of seven new centres for self-organised learning - basic cybercafes for children where every computer screen is visible to anyone nearby. Three of the new labs are in the east of India - the ones in Korakati and Chandrakona in West Bengal are in particularly remotes areas where children's access to education is currently very limited. But the focus is not just on India - Professor Mitra has opened two computer labs in the UK, in Killingworth and Newton-Aycliffe in north-east England. There are about 50 Cloud Grannies actively involved and another 50 available to help when demand grows. 'The teacher is the one who raises or exposes the subject to the children,

she constructs the questions which lead the self-organised learning,' he says. 'There needs to be a way of doing that so children aren't sitting in rows learning facts, [but] working collaboratively and helping each other along.

Jumlah Kalimat: 20

**Akurasi** =  $10 / 20 * 100 \% = 50,0 \%$

### **3. Ringkasan dari Ainurrahman (Penulis di Mukti Ali Institute Yogyakarta)**

#### **Giving the Amazon rainforest back to the Awa tribe**

Logging in the Brazilian Amazon has had a devastating effect on the rainforest and its indigenous people. However, a new operation by the army, air force and military police is designed to save an endangered tribe - by keeping loggers off their land. Pira'I is a member of a 350-strong tribe called the Awa. They live in the last islands of rainforest in what is now the extreme eastern edge of the Amazon. Now, together with his friend Hamo, he was taking his first ever flight, leaving the jungle where they have lived all their lives. Over the last couple of decades illegal loggers and farmers have invaded their ancestral lands, destroying the forest. Pira'I and his family - like most of the Awa - were forced to give up their traditional lifestyle and move into villages. Incredibly, though, a few dozen Awa are holding out. They remain uncontacted, living in the last stands of jungle in this region. For 514 years our culture has been trying to dominate their culture, but they have survived. Brazilian army, air force and military police are working alongside the Indigenous People's department and Brazil's environmental protection service. Farmers who have illegally settled on the indigenous reserve that comprises the Awa's territory, have been served notice to leave. And they seem to be doing so. The government has offered them plots elsewhere in the state. The Ibama agents took careful records of what they'd found, including the account books that carefully noted payments to the local police. Then Agent Maria Luisa Gonclaves, who had led the raid, gave the order to torch the place. That's where the helicopter came in. It flew Pira'I and Hamo, the two nervous Awa tribesmen, to the edge of the indigenous reserve where they watched a bulldozer destroy the shells of the farmers' homes. ~Finally Pira'I relaxed, breaking into a big smile as the buildings collapsed. nly then will Pira'I, Hamo and the rest of the tribe be able to live in peace.

Jumlah ringkasan = 19

Jumlah total teks sumber = 57

## **Hasil Ringkasan Sistem :**

### **BBC News - Giving the Amazon rainforest back to the Awa tribe**

However, a new operation by the army, air force and military police is designed to save an endangered tribe - by keeping loggers off their land. It took Pira'I two small steps to get up into the helicopter, but those steps bridged two completely different worlds. He grew up in a tiny nomadic tribal group, completely separate from the rest of the world. They gave me a nervous smile through the window, then the engine roared and their faces vanished in a great eddy of leaves and dust as the helicopter rose up into the air. Survival International, a pressure group that campaigns for the rights of indigenous people, has described the Awa as 'the most endangered tribe on the planet'. Over the last couple of decades illegal loggers and farmers have invaded their ancestral lands, destroying the forest. 'We would find a place to sleep, then the loggers would arrive again to cut down our trees and we would go on the run again. 'Pira'I and his family - like most of the Awa - were forced to give up their traditional lifestyle and move into villages. 'It is a miracle they are not dead,' one of the officers of Brazil's Indigenous People's Department, Funai, tells me. I had come back to witness the Brazilian government's unprecedented effort to drive out the invaders and to take back the tribe's ancestral lands. The Brazilian army, air force and military police are working alongside Brazil's environmental protection service. Farmers who have illegally settled on the indigenous reserve that comprises the Awa's territory, have been served notice to leave. I watched a family load up a truck with everything they own - including the tiles from the roof of the farm they'd lived in for 18 years. It raised a great cloud of pink dust as it rumbled off down the rough track, the family clinging to the jumble of wardrobes, tables, beds - even a satellite dish. Another day I watched raid on an illegal saw mill involving officers from Ibama, the Brazilian environment agency. The Ibama agents took careful records of what they'd found, including the account books that carefully noted payments to the local police. Then Agent Maria Luisa Gonclaves, who had led the raid, gave the order to torch the place. 'Isn't the fire beautiful,' I heard her whisper to a colleague, as we watched great tongues of flame dance up into the night sky. It flew Pira'I and Hamo, the two nervous Awa tribesmen, to the edge of the indigenous reserve where they watched a bulldozer destroy the shells of the farmers' homes.

Jumlah Kalimat: 19

Akurasi =  $8 / 19 * 100\% = 42,10\%$

#### **4. Ringkasan dari Fandi Ahmad (Penulis di Mukti Ali Institute Yogyakarta)**

##### **Is a signature still useful?**

There have been calls to phase out signatures from the banking industry. But have our own personal autographs really had their day? You might have spent years perfecting its every contour. Or you might just scrawl a desultory squiggle to show you're much too busy for such self-indulgence. Either way, you have a signature. It's there on your passport, your debit cards and your driving licence - as much a part of your bureaucratic identity as your date of birth or your National Insurance or Social Security number. Although perhaps not forever. The signature is in retreat. Chip and Pin, contactless payments, biometrics - all make it theoretically redundant. All, say advocates, are safer, more secure and harder to forge. The time has come, say the finance industry's less sentimental denizens, to strike a line through this long-standing custom for good. In the digital world, swathes of young people barely use cursive script, let alone a signature, argues Brett King, chief executive of mobile app-based debit account Moven. There are far more secure ways to prevent fraud. Therefore it's time to move on, he believes. "The signature is an artefact we don't need any more," says King. "It's a hold-over from many years ago. I think there will be a natural evolution where the signature dies a slow death." For its time, it was an effective - though never entirely failsafe - guarantee against fraud. Now, however, it has been superseded. Compared with a fingerprint, or an eye scan, "it is relatively easy to copy or alter," says identity fraud expert Tom Craig. This perhaps makes it feel strange that where the signature is still used in the banking system, it's on the really important things - on a mortgage application or a large withdrawal of money in a branch. But there's always a system of checks around the signature - photo ID or a credit check - that show the signature can't be trusted on its own. It exists in the form of assent to an agreement but much less so as an identifier. It's a matter of time before voice recognition technology or biometrics replaces it altogether, Craig believes. "I can see the signature dying out - not in the near future, but eventually." All this has led to fears that the art of the signature is dying out. The Canadian media has fretted that children are simply printing their name rather than signing because of the dominance of digital. The US Common Core State Standards Initiative, which aims to ensure consistency in US education, makes no mention of handwriting, although seven states - California, Idaho, Indiana, Kansas, Massachusetts, North Carolina and Utah - have moved to keep cursive mandatory. There's a recognition among educationalists that "writing is about more than making these marks on a page", says Rhona Stainthorp, professor of education at the University of Reading, who works with the National Handwriting Association. The fact this kind of attachment is formed to our own signatures at such an early age suggests the signature may have more life in it than the techno-enthusiasts might imagine. If it survives, it won't be because it's safer or more efficient, but because people develop an emotional attachment to their own one. "It's not like a Pin," Mike Allen, a forensic document analyst with 30

years experience. "It's someone making their mark and saying 'I agree with this.' It's not about being safer - the value of it is that it's you." More than that, it's also uniquely and entirely yours. Sincerely.

Jumlah kalimat ringkasan = 32

Jumlah kalimat = 70

### **Hasil Ringkasan Sistem**

It's there on your passport, your debit cards and your driving licence - as much a part of your bureaucratic identity as your date of birth or your National Insurance or Social Security number. In an age when cheque guarantee cards are a thing of the past, it's a rare trip to the supermarket that involves the assistant giving the back of your Visa or American Express more than a cursory glance. The time has come, say the finance industry's less sentimental denizens, to strike a line through this long-standing custom for good. In the digital world, swathes of young people barely use cursive script, let alone a signature, argues Brett King, chief executive of mobile app-based debit account Moven. It's the autograph you first honed as a teenager in the demi-expectation you'd become a pop star or a sporting hero. When Jack Lew was proposed as US Treasury Secretary - meaning his signature would appear on all dollar bills - there was widespread mockery of his looping, corkscrew-like imprint. President Barack Obama announced, apparently only semi-jokingly: 'Jack assures me that he is going to work to make at least one letter legible in order not to debase our currency.' UK Business Secretary Vince Cable's minimalist designation - a line and a dot, more smiley face than calligraphy - was widely mocked. The standard set by Elizabeth I - whose elaborate royal inscription is perhaps one of the most famous in history - is a hard one to match. John Hancock's artfully-rendered designation on the US Declaration of Independence is so widely celebrated that his name has become a byword for 'signature' among Americans. A Sumerian clay tablet from around 3100 BC is marked with the name of the scribe Gar Ama. El Cid left one in 1069, but it wasn't until parliament passed the Statute of Frauds in England in 1677 - which required that contracts be signed - that the signature became the commonly-understood acclamation of assent. The US is one of the few developed nations that requires signatures at the point of sale rather than Chip and Pin, and it reportedly accounts for more credit card fraud than the rest of the world combined. Compared with a fingerprint, or an eye scan, 'it is relatively easy to copy or alter,' says identity fraud expert Tom Craig. This perhaps makes it feel strange that where the signature is still used in the banking system, it's on the really important things - on a mortgage application or a large withdrawal of money in a branch. But there's always a system of checks around the signature - photo ID or a credit check - that show the signature can't be trusted on its own. It's a matter of time before voice recognition technology or biometrics replaces it altogether, Craig believes. In 2000 President Bill Clinton signed the first US bill into law electronically. Similarly, the author

Margaret Atwood created a device called a LongPen which allows her to remotely autograph books for fans. The US Common Core State Standards Initiative, which aims to ensure consistency in US education, makes no mention of handwriting, although seven states - California, Idaho, Indiana, Kansas, Massachusetts, North Carolina and Utah - have moved to keep cursive mandatory. The National Curriculum due to take effect in England from September 2014 requires pupils to be taught 'fluent, legible and, eventually, speedy handwriting'. There's a recognition among educationalists that 'writing is about more than making these marks on a page', says Rhona Stainthrop, professor of education at the University of Reading, who works with the National Handwriting Association. They're making Christmas cards and Mothers' Day cards in class and signing them. ' The fact this kind of attachment is formed to our own signatures at such an early age suggests the signature may have more life in it than the techno-enthusiasts might imagine.

Jumlah Kalimat: 24

**Akurasi** =  $10 / 24 * 100\% = 41,66\%$

## **B. Hasil Ringkasan Tanpa Menggunakan Filtering Corpus Stopwords**

### **1. Ringkasan dari Risky (Penulis Wikipedia dan LPM Humanish serta mahasiswa magang di Kedaulatan Rakyat)**

#### **Has wealth made Qatar happy?**

Oil and gas have made Qatar the richest country in the world - rich enough to be ready, apparently, to spend \$200bn (£120bn) on stadiums and infrastructure for the 2022 World Cup. But has virtually limitless wealth brought the country happiness? It's still cool enough to sit outside in Qatar's capital, Doha. From desperate poverty less than a century ago, this, after all, has become the richest nation in the world, with an average per-capita income topping \$100,000 (£60,000). What's less well understood is the impact of such rapid change on Qatari society itself. You can feel the pressure in Doha. Local media report that 40% of Qatari marriages now end in divorce. More than two-thirds of Qataris, adults and children, are obese. Qataris benefit from free education, free healthcare, job guarantees, grants for housing, even free water and electricity, but abundance has created its own problems. "It's bewildering for students to graduate and be faced with 20 job offers," one academic at an American university campus in Qatar tells me. "People feel an overwhelming pressure to make the right decision." The sense is deepening that, in the rush for development, something important has been lost. Qatari family life is atomising. With children almost universally being raised by nannies brought in from the Philippines, Nepal or Indonesia, gaps of culture and outlook are opening up between the

generations. Umm Khalaf, a woman in her 60s, her features hidden behind a traditional *batoola* face-mask, described to me the "beautiful simplicity" of life in her youth. "We were self-resourceful once. It's painful to lose that family intimacy," she says. Out on the dusty plains west of Doha, at Umm Al Afai - roughly, the Place of Snakes - farmer Ali al-Jehani is treating me to a tin bowl of warm, foamy camel's milk, fresh from the udder. It's the only souk I know where men go round with dustpans and brushes. "Before you could be rich if you worked and not if you didn't - it was much better," he says, swiping a soft, sweet date through the milky froth and chewing thoughtfully. "The government is trying to help, but things are moving too fast. Others echo his sense of politicians being out of step with people. Mariam Dahrouj, a journalism graduate, adjusts her niqab while speaking of a sense of threat. "People in Qatar are afraid," she says. "Suddenly all the world wants to see us. We are a closed community, and they want to come and bring their differences. How can we express our values?" Redress the balance - by, for instance, abolishing the *kafala* system that condemns migrant workers to near-slavery, or by opening Qatari citizenship to expatriates - and the fear is stability will erode and cultural values be undermined. "I didn't know about all this kafala stuff," one young Qatari woman told me. "And I'm feeling: why didn't we fix it before? "Have some sympathy for Qataris," says an American academic, who has spent years in Doha. "They've lost almost everything that matters."

Jumlah ringkasan = 22

Jumlah kalimat teks sumber = 46

### **Hasil ringkasan sistem:**

Oil and gas have made Qatar the richest country in the world - rich enough to be ready, apparently, to spend \$200bn (£120bn) on stadiums and infrastructure for the 2022 World Cup. In another few weeks it will be too hot and most people - those who don't have to work outside - will be retreating indoors to the comfort of air-conditioning. Glass and steel towers rise like an artificial forest from what was once a shoreline of flat sand. 'Our social and economic life has changed - families have become separated, consumption culture has taken over. From desperate poverty less than a century ago, this, after all, has become the richest nation in the world, with an average per-capita income topping \$100,000 (£60,000). Qataris benefit from free education, free healthcare, job guarantees, grants for housing, even free water and electricity, but abundance has created its own problems. 'It's bewildering for students to graduate and be faced with 20 job offers,' one academic at an American university campus in Qatar tells me. 'In a society where Qataris are outnumbered roughly seven-to-one by expatriates, long-term residents speak of a growing frustration among graduates that they are being fobbed off with sinecures while the most satisfying jobs go to foreigners. With children almost universally being raised by nannies brought in from the Philippines, Nepal or Indonesia, gaps of culture and outlook are opening up between the generations.'

Umm Khalaf, a woman in her 60s, her features hidden behind a traditional batoola face-mask, described to me the 'beautiful simplicity' of life in her youth. Out on the dusty plains west of Doha, at Umm Al Afai - roughly, the Place of Snakes - farmer Ali al-Jehani is treating me to a tin bowl of warm, foamy camel's milk, fresh from the udder. 'Before you could be rich if you worked and not if you didn't - it was much better,' he says, swiping a soft, sweet date through the milky froth and chewing thoughtfully. 'Others echo his sense of politicians being out of step with people, particularly with regard to the strenuous - and allegedly corrupt - effort made to bring the 2022 football World Cup to Qatar, and the unanticipated level of media scrutiny that has come with the turmoil of construction. Redress the balance - by, for instance, abolishing the kafala system that condemns migrant workers to near-slavery, or by opening Qatari citizenship to expatriates - and the fear is stability will erode and cultural values be undermined. As once-solid regional alliances with Saudi Arabia and other neighbours crumble, and corrosive apprehension spreads among Qataris about the impact of the World Cup - still eight years away - the government may yet find itself facing pressure to reform. 'Behind the Corniche, coffee-drinkers and waterpipe-smokers enjoy the cool evening in the Souk Waqif market - a replica, since the original was torn down a decade ago and rebuilt to look old.

Jumlah Kalimat: 16

Akurasi =  $8/16 * 100 \% = 50 \%$

## **2. Ringkasan dari Imam Nawawi peneliti di Lembaga Pengkajian Pembangunan Bangsa (LP2B), Yogyakarta dan penulis di CV. Bintang Media**

### **School in the cloud: Children with mentors on the other side of the world**

Five years ago, an Indian schoolboy struck up an unlikely friendship with a retired teacher in London - and with her help he is now studying to be a doctor. Even though they live thousands of miles apart and have never met, they can't imagine life without each other. When Shahrukh Khan was 13, his school in Hyderabad got a new computer lab, and it changed his life. He and his fellow pupils would get together in a small room to explore the internet but they also had a chance to chat with retired teachers in other countries. It was part of a new scheme that linked pupils with foreign mentors - the children could ask whatever they wanted and the adults on the other side of the world would offer encouragement and advice on where to find the answers to their questions. Fewings was 60 and had just retired from teaching. She lives in Hackney, east London and joined the project in 2009, after reading about it in a newspaper. They started to email each other and she began to help him with his English. His English improved in leaps and bounds. As the years passed, Khan told Fewings that he wanted to become a doctor and planned to apply to university in the UK. With Fewings' help, Khan decided that studying in England would be more expensive and more complicated than he had anticipated. He considered other countries and looked at universities in Ukraine, Russia, China and the Philippines. Fewings prompted him to think



about cultural differences, the climate and living conditions in each place. After much discussion, he settled on the Philippines where he is about to start a medical degree. Khan is just one of thousands of children who have benefitted from the project, the seeds of which were sown 15 years ago, when academic Sugata Mitra gave children in a Delhi slum free access to a computer and let them use it however they wished. 'I began to suspect that reading in groups is different from reading individually,' he says. Last year, Mitra won a \$1m (£650,000) prize from the organisers of the Technology Entertainment and Design (TED) conference - he's using the money to fund the next phase, which is known as the "School in the Cloud". But the focus is not just on India - Professor Mitra has opened two computer labs in the UK, in Killingworth and Newton-Aycliffe in north-east England. The students there also have access to mentors who are known as Cloud Grannies - although many, like Fewings, are not actually grandmothers. There are about 50 Cloud Grannies actively involved and another 50 available to help when demand grows.

Jumlah kalimat = 20

Total Kalimat Sumber = 60

### **Hasil ringkasan sistem:**

#### **School in the cloud: Children with mentors on the other side of the world**

Five years ago, an Indian schoolboy struck up an unlikely friendship with a retired teacher in London - and with her help he is now studying to be a doctor. Even though they live thousands of miles apart and have never met, they can't imagine life without each other. He and his fellow pupils would get together in a small room to explore the internet but they also had a chance to chat with retired teachers in other countries. It was part of a new scheme that linked pupils with foreign mentors - the children could ask whatever they wanted and the adults on the other side of the world would offer encouragement and advice on where to find the answers to their questions. 'His comprehension skills were not good so I would challenge him quite a lot - did you understand what I said? 'I've got a very different viewpoint to the one that he has been exposed to so we'd laugh a bit - I tease him a little bit and he teases me - he knows if I write in capital letters that I'm shouting. Khan's father had died when he was just six - his eldest brother supported the family and paid his school fees but could not give him advice about applying to foreign universities. 'Fewings did some research to find out how much it would cost, how he could apply and how to avoid scams. 'He was sending me flyers on the internet for colleges in Cambridge and then actually when you looked at it, it was a PO Box in a little village somewhere,' she says. 'I think what I have done is help him see that the world isn't very straightforward and there are people out to get you and you have to be very discriminating,' she says. So I looked up what the temperature would be in the Gobi desert [often freezing] and said, 'You live in Hyderabad why wear lots of clothes? Khan is just one of thousands of children who have benefitted from the project, the seeds of which

were sown 15 years ago, when academic Sugata Mitra gave children in a Delhi slum free access to a computer and let them use it however they wished. He wanted to see if the children could teach themselves to operate it without any instruction and was amazed how quickly they gathered round the screen and worked together to pick up new concepts. Mitra saw 'that children can go well over 10 or 12 years ahead of their time using this kind of method'. Last year, Mitra won a \$1m (£650,000) prize from the organisers of the Technology Entertainment and Design (TED) conference - he's using the money to fund the next phase, which is known as the 'School in the Cloud'. This is a network of seven new centres for self-organised learning - basic cybercafes for children where every computer screen is visible to anyone nearby. Three of the new labs are in the east of India - the ones in Korakati and Chandrakona in West Bengal are in particularly remotes areas where children's access to education is currently very limited. But the focus is not just on India - Professor Mitra has opened two computer labs in the UK, in Killingworth and Newton-Aycliffe in north-east England. The students there also have access to mentors who are known as Cloud Grannies - although many, like Fewings, are not actually grandmothers. 'There needs to be a way of doing that so children aren't sitting in rows learning facts, [but] working collaboratively and helping each other along.

Jumlah Kalimat: 20

$9/20 * 100\% = 45\%$

### **3. Ringkasan dari Ainurrahman (Penulis di Mukti Ali Institute Yogyakarta)**

#### **Giving the Amazon rainforest back to the Awa tribe**

Logging in the Brazilian Amazon has had a devastating effect on the rainforest and its indigenous people. However, a new operation by the army, air force and military police is designed to save an endangered tribe - by keeping loggers off their land. Pira'I is a member of a 350-strong tribe called the Awa. They live in the last islands of rainforest in what is now the extreme eastern edge of the Amazon. Now, together with his friend Hamo, he was taking his first ever flight, leaving the jungle where they have lived all their lives. Over the last couple of decades illegal loggers and farmers have invaded their ancestral lands, destroying the forest. Pira'I and his family - like most of the Awa - were forced to give up their traditional lifestyle and move into villages. Incredibly, though, a few dozen Awa are holding out. They remain uncontacted, living in the last stands of jungle in this region. For 514 years our culture has been trying to dominate their culture, but they have survived. Brazilian army, air force and military police are working alongside the Indigenous People's department and Brazil's environmental protection service. Farmers who have illegally settled on the indigenous reserve that comprises the Awa's territory, have been served notice to leave. And they seem to be doing so. The government has offered them plots elsewhere in the state. The Ibama agents took careful records of what they'd found, including the account books that carefully noted payments to the local police. Then Agent Maria

Luisa Gonclaves, who had led the raid, gave the order to torch the place. That's where the helicopter came in. It flew Pira'I and Hamo, the two nervous Awa tribesmen, to the edge of the indigenous reserve where they watched a bulldozer destroy the shells of the farmers' homes.~Finally Pira'I relaxed, breaking into a big smile as the buildings collapsed. nly then will Pira'I, Hamo and the rest of the tribe be able to live in peace.

Jumlah ringkasan = 19

Jumlah total teks sumber = 57

### **Hasil Ringkasan Sistem :**

However, a new operation by the army, air force and military police is designed to save an endangered tribe - by keeping loggers off their land. It took Pira'I two small steps to get up into the helicopter, but those steps bridged two completely different worlds. Now, together with his friend Hamo, he was taking his first ever flight, leaving the jungle where they have lived all their lives. They gave me a nervous smile through the window, then the engine roared and their faces vanished in a great eddy of leaves and dust as the helicopter rose up into the air. Survival International, a pressure group that campaigns for the rights of indigenous people, has described the Awa as 'the most endangered tribe on the planet'. 'We would find a place to sleep, then the loggers would arrive again to cut down our trees and we would go on the run again. 'Pira'I and his family - like most of the Awa - were forced to give up their traditional lifestyle and move into villages. 'For 514 years our culture has been trying to dominate their culture, but they have survived. 'And, thanks to the efforts of people like Leo Lenin and Survival International they are now much more likely to do so. I had come back to witness the Brazilian government's unprecedented effort to drive out the invaders and to take back the tribe's ancestral lands. Farmers who have illegally settled on the indigenous reserve that comprises the Awa's territory, have been served notice to leave. I watched a family load up a truck with everything they own - including the tiles from the roof of the farm they'd lived in for 18 years. It raised a great cloud of pink dust as it rumbled off down the rough track, the family clinging to the jumble of wardrobes, tables, beds - even a satellite dish. Another day I watched raid on an illegal saw mill involving officers from Ibama, the Brazilian environment agency. 'I saw it with my own eyes, they have sent the non-Indians a long way away, they must have told them 'go away! The Ibama agents took careful records of what they'd found, including the account books that carefully noted payments to the local police. 'Isn't the fire beautiful,' I heard her whisper to a colleague, as we watched great tongues of flame dance up into the night sky. It flew Pira'I and Hamo, the two nervous Awa tribesmen, to the edge of the indigenous reserve where they watched a bulldozer destroy the shells of the farmers' homes. 'I saw it with my own eyes, they have sent the non-Indians a long way away, they must have told them, 'Go away!

Jumlah Kalimat: 19 Akurasi =  $7/19 * 100 = 36,84$

#### **4. Ringkasan dari Fandi Ahmad (Penulis di Mukti Ali Institute Yogyakarta)**

##### **Is a signature still useful?**

There have been calls to phase out signatures from the banking industry. But have our own personal autographs really had their day? You might have spent years perfecting its every contour. Or you might just scrawl a desultory squiggle to show you're much too busy for such self-indulgence. Either way, you have a signature. It's there on your passport, your debit cards and your driving licence - as much a part of your bureaucratic identity as your date of birth or your National Insurance or Social Security number. Although perhaps not forever. The signature is in retreat. Chip and Pin, contactless payments, biometrics - all make it theoretically redundant. All, say advocates, are safer, more secure and harder to forge. The time has come, say the finance industry's less sentimental denizens, to strike a line through this long-standing custom for good. In the digital world, swathes of young people barely use cursive script, let alone a signature, argues Brett King, chief executive of mobile app-based debit account Moven. There are far more secure ways to prevent fraud. Therefore it's time to move on, he believes. "The signature is an artefact we don't need any more," says King. "It's a hold-over from many years ago. I think there will be a natural evolution where the signature dies a slow death." For its time, it was an effective - though never entirely failsafe - guarantee against fraud. Now, however, it has been superseded. Compared with a fingerprint, or an eye scan, "it is relatively easy to copy or alter," says identity fraud expert Tom Craig. This perhaps makes it feel strange that where the signature is still used in the banking system, it's on the really important things - on a mortgage application or a large withdrawal of money in a branch. But there's always a system of checks around the signature - photo ID or a credit check - that show the signature can't be trusted on its own. It exists in the form of assent to an agreement but much less so as an identifier. It's a matter of time before voice recognition technology or biometrics replaces it altogether, Craig believes. "I can see the signature dying out - not in the near future, but eventually." All this has led to fears that the art of the signature is dying out. The Canadian media has fretted that children are simply printing their name rather than signing because of the dominance of digital. The US Common Core State Standards Initiative, which aims to ensure consistency in US education, makes no mention of handwriting, although seven states - California, Idaho, Indiana, Kansas, Massachusetts, North Carolina and Utah - have moved to keep cursive mandatory. There's a recognition among educationalists that "writing is about more than making these marks on a page", says Rhona Stainthorp, professor of education at the University of Reading, who works with the National Handwriting Association. The fact this kind of attachment is formed to our own signatures at such an early age suggests the signature may have more life in it than the techno-enthusiasts might imagine. If it survives, it won't be because it's safer or more efficient, but because people develop an emotional attachment to their own one. "It's not like a Pin," Mike Allen, a forensic document analyst with 30 years experience. "It's someone making their mark and saying 'I agree with this.'

It's not about being safer - the value of it is that it's you." More than that, it's also uniquely and entirely yours. Sincerely.

Jumlah kalimat ringkasan = 32

Jumlah kalimat = 70

### **Hasil Ringkasan Sistem**

Or you might just scrawl a desultory squiggle to show you're much too busy for such self-indulgence. It's there on your passport, your debit cards and your driving licence - as much a part of your bureaucratic identity as your date of birth or your National Insurance or Social Security number. In an age when cheque guarantee cards are a thing of the past, it's a rare trip to the supermarket that involves the assistant giving the back of your Visa or American Express more than a cursory glance. The time has come, say the finance industry's less sentimental denizens, to strike a line through this long-standing custom for good. In the digital world, swathes of young people barely use cursive script, let alone a signature, argues Brett King, chief executive of mobile app-based debit account Moven. When Jack Lew was proposed as US Treasury Secretary - meaning his signature would appear on all dollar bills - there was widespread mockery of his looping, corkscrew-like imprint. President Barack Obama announced, apparently only semi-jokingly: 'Jack assures me that he is going to work to make at least one letter legible in order not to debase our currency.' UK Business Secretary Vince Cable's minimalist designation - a line and a dot, more smiley face than calligraphy - was widely mocked. The standard set by Elizabeth I - whose elaborate royal inscription is perhaps one of the most famous in history - is a hard one to match. John Hancock's artfully-rendered designation on the US Declaration of Independence is so widely celebrated that his name has become a byword for 'signature' among Americans. El Cid left one in 1069, but it wasn't until parliament passed the Statute of Frauds in England in 1677 - which required that contracts be signed - that the signature became the commonly-understood acclamation of assent. The US is one of the few developed nations that requires signatures at the point of sale rather than Chip and Pin, and it reportedly accounts for more credit card fraud than the rest of the world combined. Compared with a fingerprint, or an eye scan, 'it is relatively easy to copy or alter,' says identity fraud expert Tom Craig. This perhaps makes it feel strange that where the signature is still used in the banking system, it's on the really important things - on a mortgage application or a large withdrawal of money in a branch. But there's always a system of checks around the signature - photo ID or a credit check - that show the signature can't be trusted on its own. Now Obama has an Autopen stylus which he has used to imprint his signature on to legislation while on holiday in Hawaii. Similarly, the author Margaret Atwood created a device called a LongPen which allows her to remotely autograph books for fans. The Canadian media has fretted that children are simply printing their name rather than signing because of the dominance of digital. The US Common Core State Standards Initiative, which

aims to ensure consistency in US education, makes no mention of handwriting, although seven states - California, Idaho, Indiana, Kansas, Massachusetts, North Carolina and Utah - have moved to keep cursive mandatory. The National Curriculum due to take effect in England from September 2014 requires pupils to be taught 'fluent, legible and, eventually, speedy handwriting'. There's a recognition among educationalists that 'writing is about more than making these marks on a page', says Rhona Stainthorp, professor of education at the University of Reading, who works with the National Handwriting Association. 'I do know when I talk to young children they've got this concept of a signature,' she says. 'The fact this kind of attachment is formed to our own signatures at such an early age suggests the signature may have more life in it than the techno-enthusiasts might imagine. If it survives, it won't be because it's safer or more efficient, but because people develop an emotional attachment to their own one.'

Jumlah Kalimat: 24

$11/24 * 100 = 45,83 \%$

## LAMPIRAN II

### Hasil kuesioner penilaian aplikasi

### LEMBAR ANKET PENGUJIAN HASIL RINGKASAN APLIKASI

Petunjuk pengisian :

1. Tulislah nama dan pekerjaan anda pada tempat yang telah disediakan
2. Berilah tanda check (√) pada kolom jawaban yang anda pilih, yaitu Sangat Setuju (SS), Setuju (S), Netral (N), Tidak Setuju (TS), Sangat Tidak Setuju (STS)

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Nama : Dewi Handayani  
Pekerjaan : Mahasiswi

#### 1. Pengujian Hasil Ringkasan Aplikasi

No	Pertanyaan	Penilaian				
		SS	S	N	TS	STS
1	Hasil ringkasan mudah dipahami		√			
2	Hasil ringkasan aplikasi sesuai dengan topik artikel		√			
3	Hasil ringkasan aplikasi bisa menyimpulkan isi artikel		√			
4	Hasil ringkasan aplikasi tidak kehilangan makna		√			
5	Hasil Ringkasan aplikasi Ideal(tidak terlalu panjang dan tidak terlalu pendek)			√		

## LEMBAR ANGKET PENGUJIAN HASIL RINGKASAN APLIKASI

Petunjuk pengisian :

3. Tulislah nama dan pekerjaan anda pada tempat yang telah disediakan
4. Berilah tanda check (√) pada kolom jawaban yang anda pilih, yaitu Sangat Setuju (SS), Setuju (S), Netral (N), Tidak Setuju (TS), Sangat Tidak Setuju (STS)

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Nama : Izra Berakon  
Pekerjaan : Mahasiswa

### 2. Pengujian Hasil Ringkasan Aplikasi

No	Pertanyaan	Penilaian				
		SS	S	N	TS	STS
1	Hasil ringkasan mudah dipahami		√			
2	Hasil ringkasan aplikasi sesuai dengan topik artikel		√			
3	Hasil ringkasan aplikasi bisa menyimpulkan isi artikel		√			
4	Hasil ringkasan aplikasi tidak kehilangan makna		√			
5	Hasil Ringkasan aplikasi Ideal(tidak terlalu panjang dan tidak terlalu pendek)		√			