

BAB V

KESIMPULAN DAN SARAN

5.1. Kesimpulan

Berdasarkan hasil eksperimen yang meliputi pengolahan fiksasi dan heatmap serta analisis hasil fiksasi dan hasil heatmap yang telah dilakukan, maka dapat disimpulkan beberapa hal sebagai berikut:

- a. Identifikasi objek kunci situs web *e-commerce* dapat dilakukan dengan menggunakan teknologi *eye tracker*. Dalam melakukan identifikasi ini, data diambil dengan teknologi *eye tracker* dari responden melalui eksperimen dengan skenario tugas mengamati halaman awal situs web, melakukan *login*, pengamatan halaman produk, menghubungi penjual, dan melakukan *logout*. Kemudian data tersebut diolah untuk dapat menghasilkan data fiksasi dan grafik *heatmap* yang dijadikan bahan analisis untuk mengidentifikasi objek kunci situs web *e-commerce*. Pada pengolahan data, digunakan teknik pembagian wilayah objek (*Area of Interest*) yang dapat membantu memudahkan proses kalkulasi durasi fiksasi, jumlah fiksasi, dan atensi responden untuk menghasilkan hasil analisis yang lebih baik.
- b. Langkah-langkah identifikasi objek kunci situs web *e-commerce* yang telah dilakukan dapat menemukan dua objek yang dianggap penting dan menjadi objek kunci. Objek yang pertama yaitu objek detail produk dengan total durasi fiksasi responden selama 110213.4 milidetik, dengan jumlah fiksasi responden sebanyak 363 kali, dan dengan total

persentase atensi responden sebanyak 98%. Objek yang kedua yaitu objek data produk dengan total persentase atensi dari responden sebanyak 98%.

5.2. Saran

Saran ini diberikan kepada penelitian selanjutnya, peneliti selanjutnya dapat mengembangkan perangkat lunak untuk pengambilan data dari *eye tracker* dengan tampilan GUI dan tidak terbatas pada *console* agar lebih memudahkan responden selama proses eksperimen pengambilan data.

Saran selanjutnya diberikan kepada pengembang situs web *e-commerce* agar dapat memperhatikan objek detail produk dan objek data produk pada halaman situs web. Berdasarkan hasil penelitian, kedua objek ini menjadi objek kunci dari situs web *e-commerce*. Oleh karena itu, sebaiknya perlu diperhatikan tata letaknya pada antarmuka saat mengembangkan situs web *e-commerce*.

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LAMPIRAN



1-Lampiran Informed Consent



Lembar Persetujuan & Informed Consent

Deskripsi Eksperimen

Terima kasih telah bersedia meluangkan waktu Anda dalam eksperimen ini. Penelitian ini bertujuan untuk mengetahui Pergerakan mata untuk penganalisaan usability menggunakan eye tracking. Partisipasi Anda bersifat sukarela tidak ada paksaan dari pihak manapun bagi Anda untuk mengikuti maupun menyelesaikan proses pengambilan data. Anda diperbolehkan untuk berhenti selama eksperimen ini berlangsung apabila merasa terganggu dengan proses pengambilan data. Anda akan tetap menerima reward dari eksperimenter meskipun tidak menyelesaikan tugas.

Tugas Partisipan

Anda diminta untuk menyelesaikan tugas yang diberikan untuk menggunakan Situs E-Commerce (OLX dan Tokopedia) dan E-Learning Situs Kuliah Atma aya Yogyakarta yang ditampilkan di layar monitor. Saat melakukan tugas tersebut, data pergerakan mata direkam melalui Eye tracker (Tobi), Eye Overlay gaze (Tobi) dan Webcam. Akan ada pembatasan waktu untuk setiap tugas yang diberikan, Anda diharapkan menyelesaikan tugas yang ada sesuai kemampuan Anda. Anda juga diminta untuk mengisi kuesioner yang dilakukan pada akhir sesi.

Keuntungan Bagi Partisipan

Anda akan mendapatkan kompensasi atas waktu Anda berupa fee berupa Snack dan Pulsa Sebesar Rp 25.000,00- yang diberikan pada akhir eksperimen.

Resiko yang Mungkin Terjadi

Resiko fisik yang mungkin terjadi dari eksperimen ini termasuk ketidaknyamanan yang mungkin Anda rasakan karena pergerakan yang dibatasi selama eksperimen. Resiko lain yang mungkin terjadi adalah keterkejutan terhadap stimulus pada saat menyelesaikan Tugas yang diberikan selama eksperimen, Anda diminta untuk memberikan informasi pada eksperimenter apabila memiliki permasalahan spesifik terhadap permasalahan yang dimiliki terkait gangguan mata.

Saya memahami hal-hal diatas dan setuju untuk berpartisipasi.

Nama Terang :

Email :

Silahkan menghubungi eksperimenter Apabila ada pertanyaan terkait studi ini atau tertarik dengan rangkuman hasil penelitian.

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Yohanes Rizky Gumilir (Informatika UAJY) yorigum@gmail.com

2-Lampiran Instruksi Tugas Responden



INSTRUKSI TUGAS EKSPERIMEN EYE TRACKER

Pada tahap ini responden diminta untuk mengakses halaman-halaman di situs web tokopedia.com dengan menggunakan akun milik pribadi.

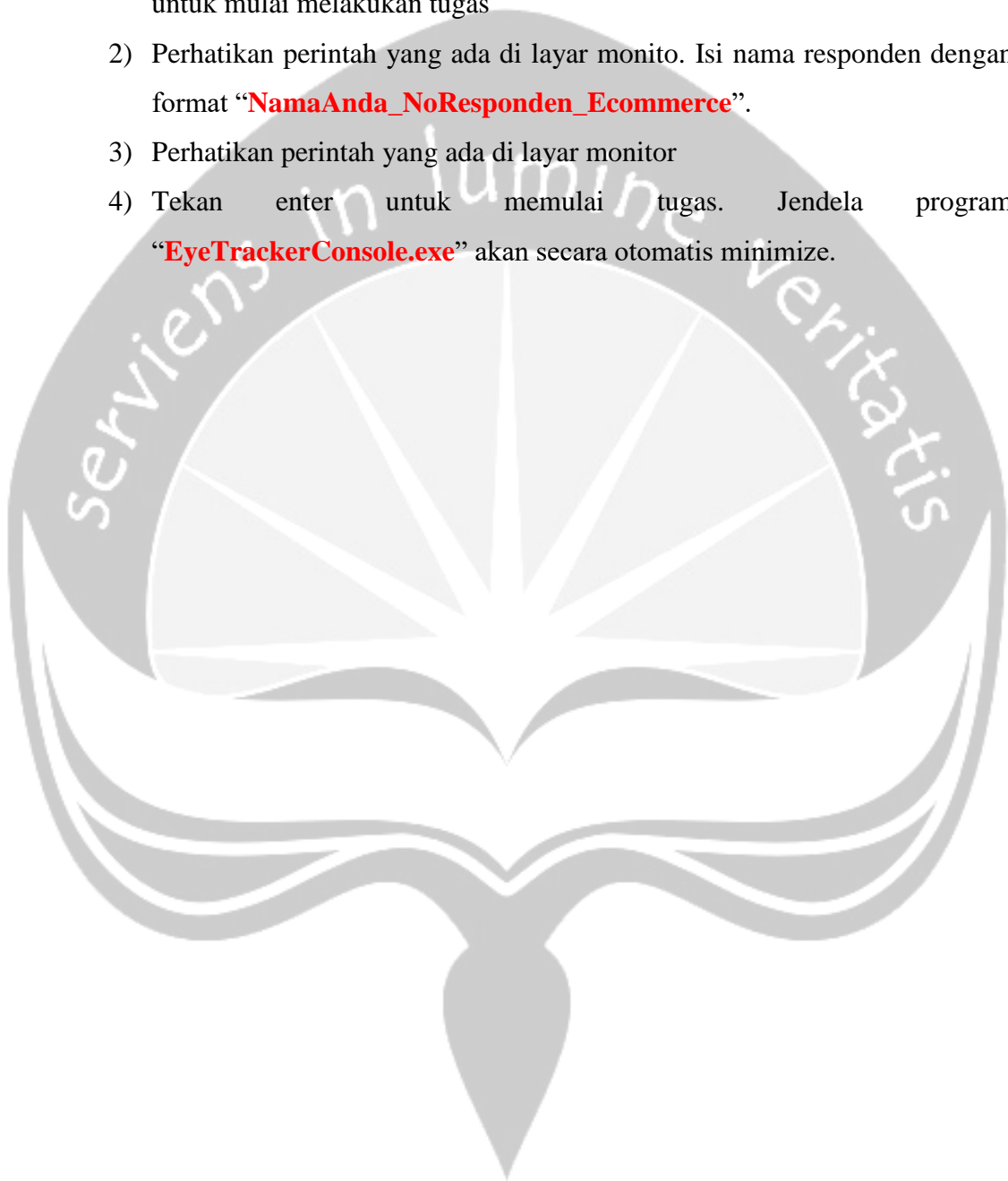
Peraturan yang perlu diperhatikan selama melaksanakan tugas yang ada :

1. **Tidak diperbolehkan** melakukan gerakan yang berlebihan (Geleng-geleng kepala, menggeser-geser kursi,dan gerakan-gerakan lain yang berlebihan).
2. **Tidak diperbolehkan** untuk mengakses situs web lain,selain yang diberikan oleh eksperimenter.

Untuk mengerjakan tugas, dimohon untuk **membaca** dan **melakukan** perintah di bawah ini dengan **cermat** dan baik.

Langkah Awal Pengambilan Data

- 1) Buka Program “**EyeTrackerConsole.exe**” yang terdapat di desktop untuk mulai melakukan tugas
- 2) Perhatikan perintah yang ada di layar monito. Isi nama responden dengan format “**NamaAnda_NoResponden_Ecommerce**”.
- 3) Perhatikan perintah yang ada di layar monitor
- 4) Tekan enter untuk memulai tugas. Jendela program “**EyeTrackerConsole.exe**” akan secara otomatis minimize.



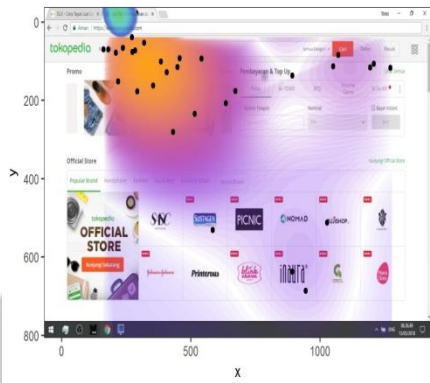
EXPERIMEN PADA SITUS ECOMERCE : tokopedia.com

- 1) Buka Browser Google Chrome, kemudian buka halaman tokopedia dengan alamat : <https://tokopedia.com>
- 2) **Amati** situs Tokopedia yang sudah terbuka secara keseluruhan.
- 3) Jika sudah cukup melakukan pengamatan, buka halaman **LOGIN** tokopedia dengan alamat : <https://www.tokopedia.com/login/>
- 4) Kemudian lakukan login dengan akun tokopedia Anda. Jika Anda lupa password atau belum mempunyai akun, silahkan menggunakan akun berikut ini :
Email : partisipant@gmail.com
Pass : **sayapartisipan**
- 5) Lakukan **pengamatan** pada hasil pencarian barang :”**WD Passport 1 by ETSHOP Research**”. Pastikan akun penjual ialah “**ET Shop Research**”
- 6) Jika sudah cukup melakukan pengamatan, hubungi penjual melalui fitur chat dengan mengirimkan pesan dengan format:
“Saya <<NamaLengkap_Responden>> sudah melakukan eksperimen eyetracker pada situs tokopedia.com”
- 7) Setelah berhasil mengirimkan pesan, lakukan **Logout** dari menu profil.
- 8) Selanjutnya buka kembali program “**Eyetrackerconsole.exe**” yang sudah dibuka sebelumnya, kemudian tekan “**ENTER**” untuk menyelesaikan pengambilan data ecommerce.

3-Lampiran visualisasi heatmap responden Tugas 1



Heatmap Responden 1



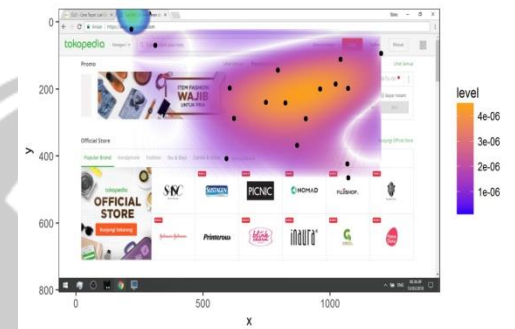
Heatmap Responden 2



Heatmap Responden 3



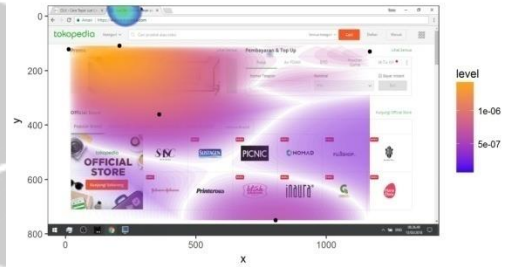
Heatmap Responden 4



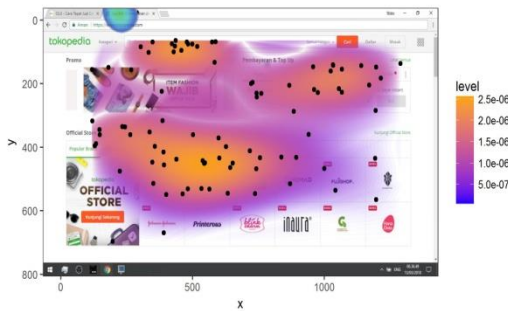
Heatmap Responden 5



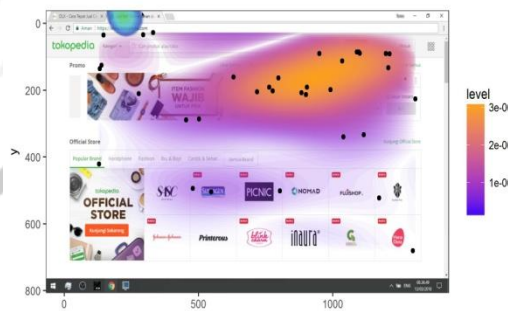
Heatmap Responden 6



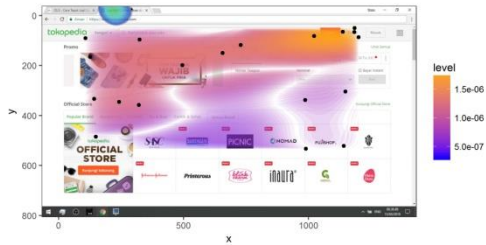
Heatmap Responden 7



Heatmap Responden 8



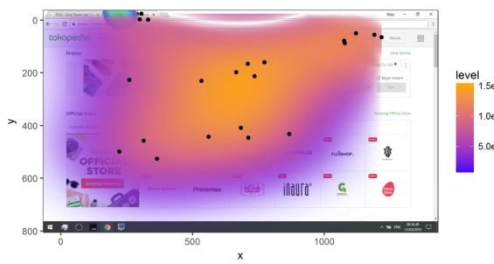
Heatmap Responden 9



Heatmap Responden 10



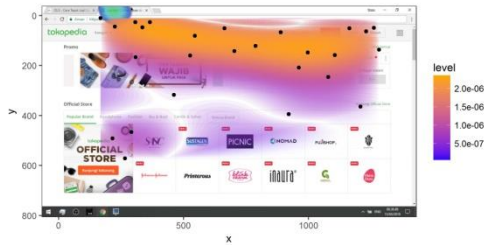
Heatmap Responden 11



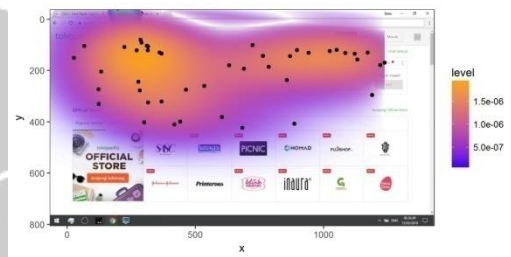
Heatmap Responden 12



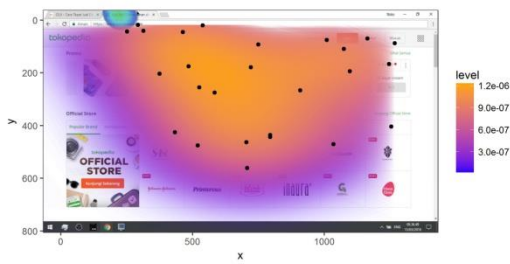
Heatmap Responden 13



Heatmap Responden 14



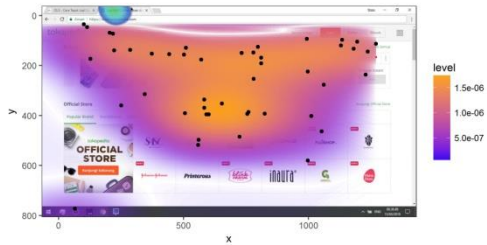
Heatmap Responden 15



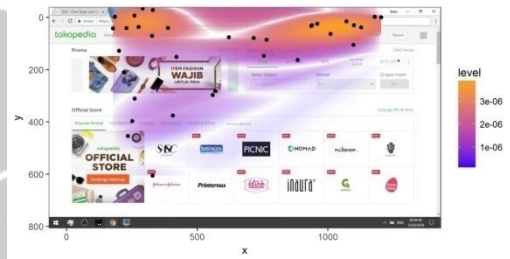
Heatmap Responden 16



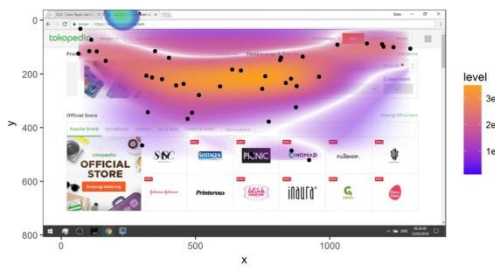
Heatmap Responden 17



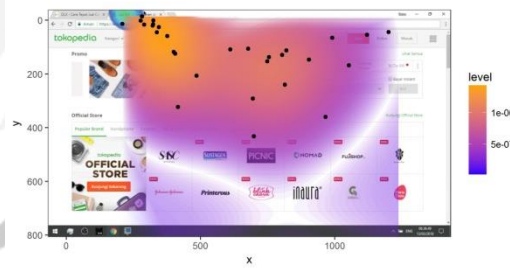
Heatmap Responden 18



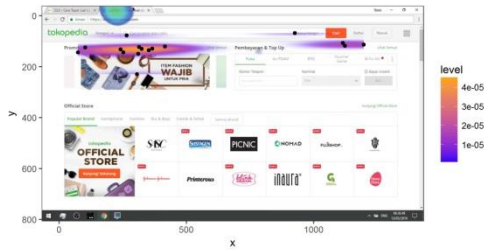
Heatmap Responden 19



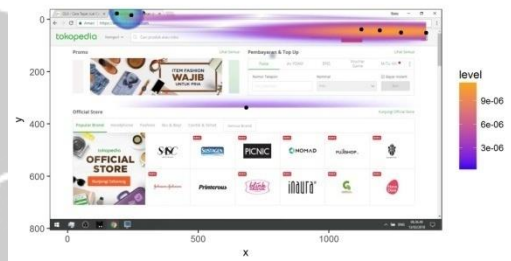
Heatmap Responden 20



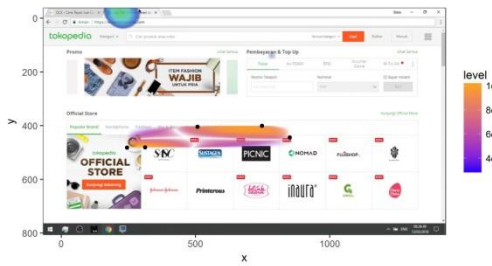
Heatmap Responden 21



Heatmap Responden 22



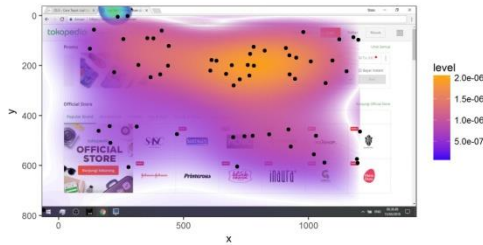
Heatmap Responden 23



Heatmap Responden 24



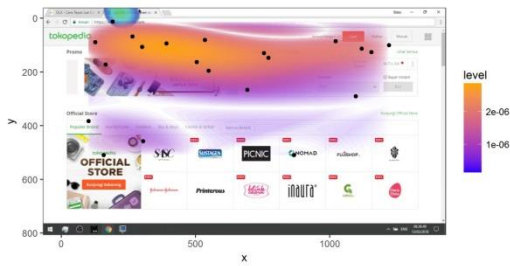
Heatmap Responden 25



Heatmap Responden 26



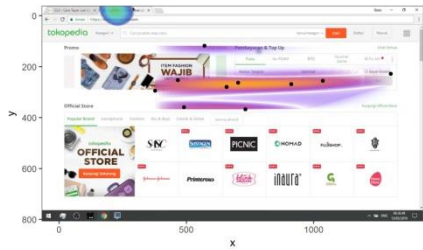
Heatmap Responden 27



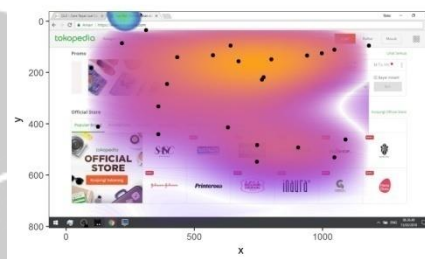
Heatmap Responden 28



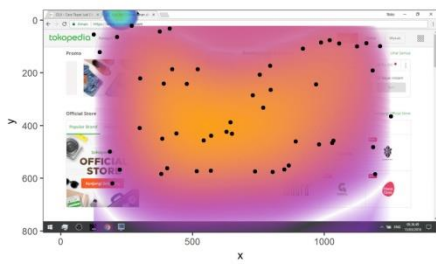
Heatmap Responden 29



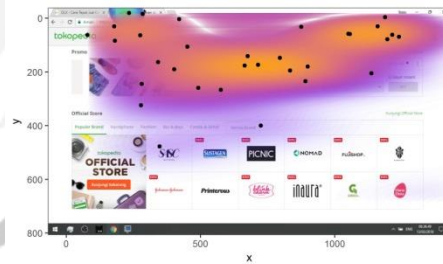
Heatmap Responden 30



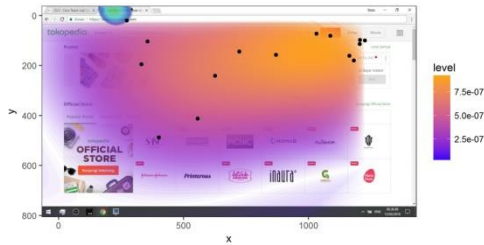
Heatmap Responden 31



Heatmap Responden 32



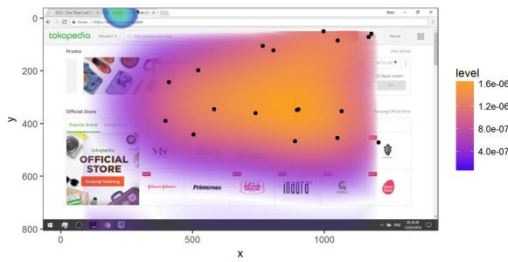
Heatmap Responden 33



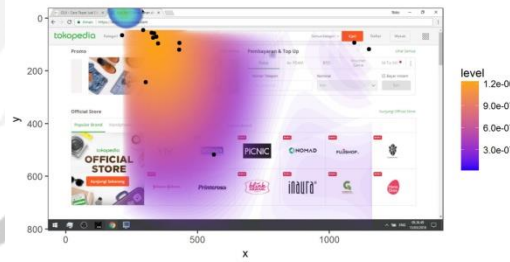
Heatmap Responden 34



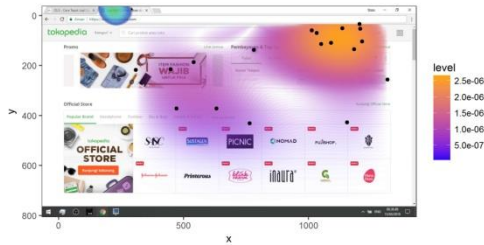
Heatmap Responden 35



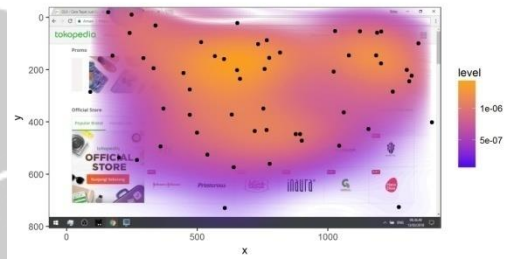
Heatmap Responden 36



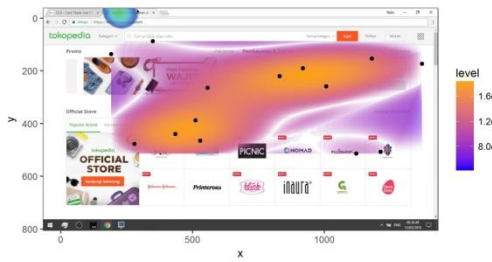
Heatmap Responden 37



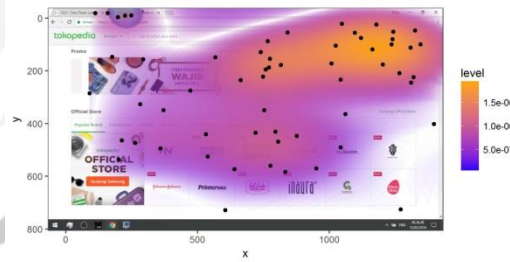
Heatmap Responden 28



Heatmap Responden 39



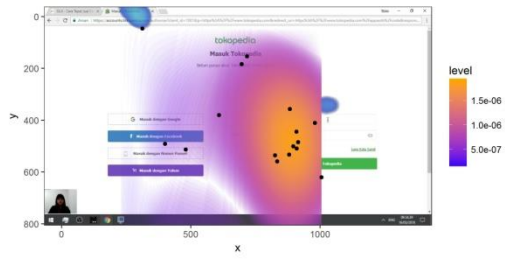
Heatmap Responden 40



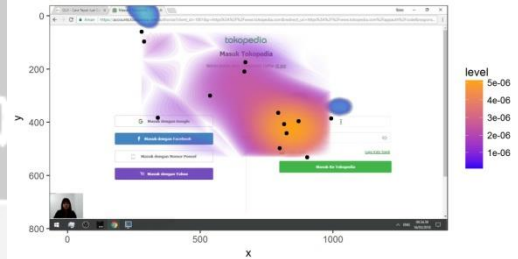
4-Visualisasi Heatmap Responden Tugas 2 Tipe A



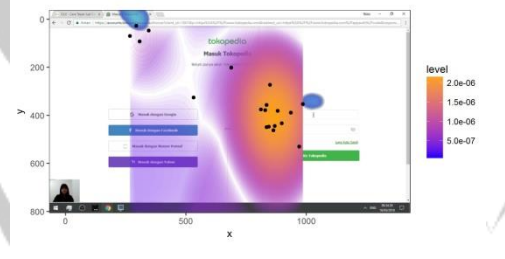
Heatmap Responden 1



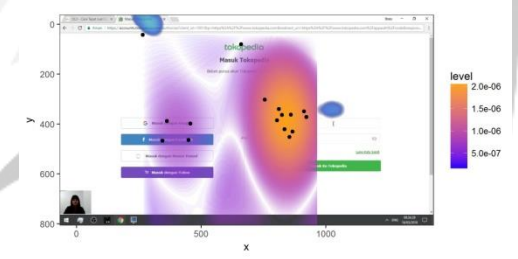
Heatmap Responden 2



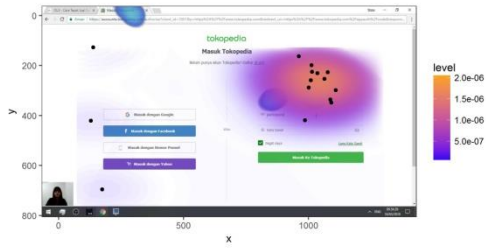
Heatmap Responden 3



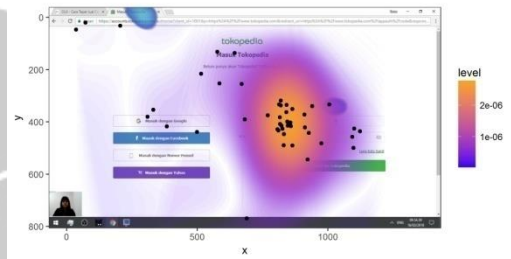
Heatmap Responden 4



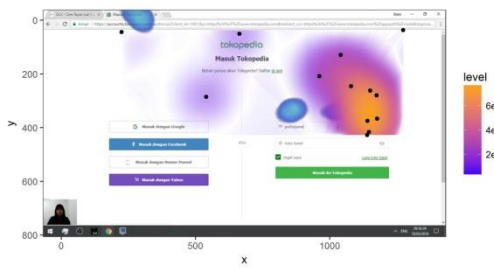
Heatmap Responden 5



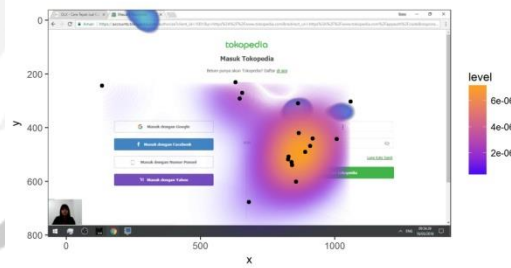
Heatmap Responden 6



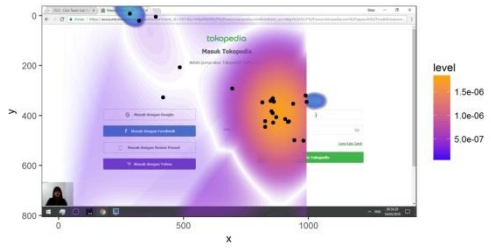
Heatmap Responden 7



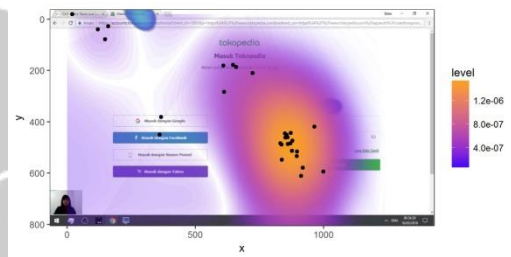
Heatmap Responden 8



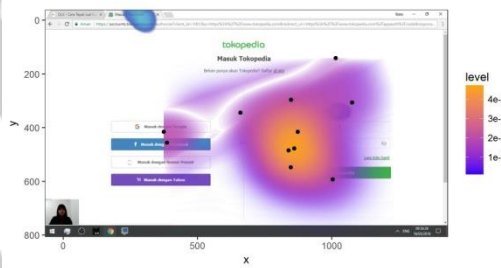
Heatmap Responden 9



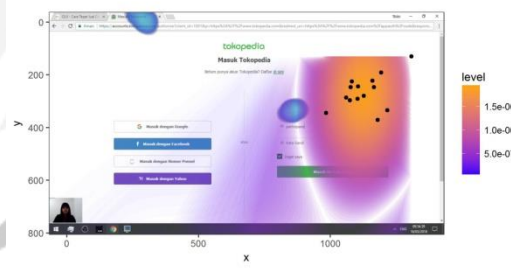
Heatmap Responden 10



Heatmap Responden 11



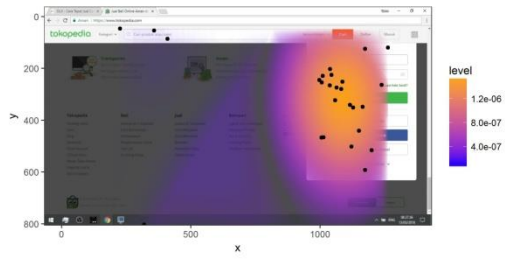
Heatmap Responden 12



5-Lampiran Visualisasi Heatmap Tugas 2 Tipe B



Heatmap Responden 1



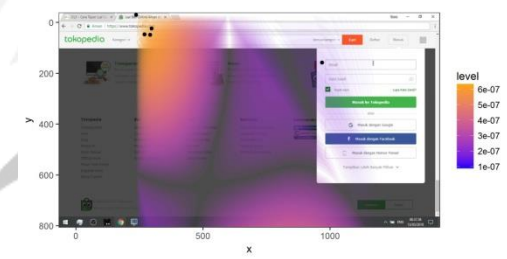
Heatmap Responden 2



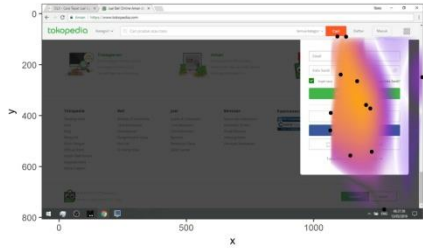
Heatmap Responden 3



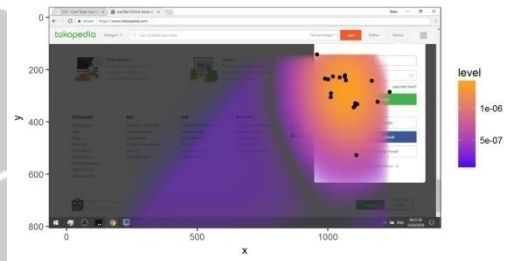
Heatmap Responden 4



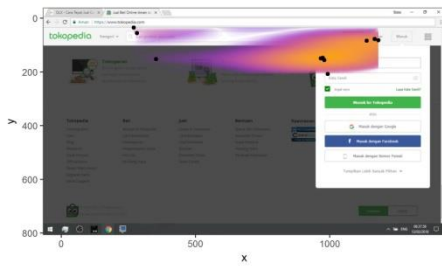
Heatmap Responden 5



Heatmap Responden 6



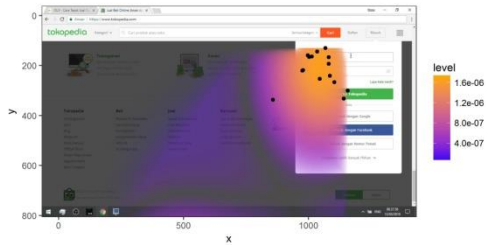
Heatmap Responden 7



Heatmap Responden 8



Heatmap Responden 9



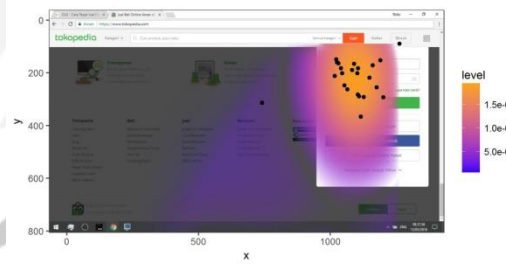
Heatmap Responden 10



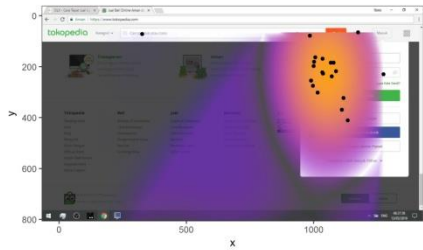
Heatmap Responden 11



Heatmap Responden 12



Heatmap Responden 13



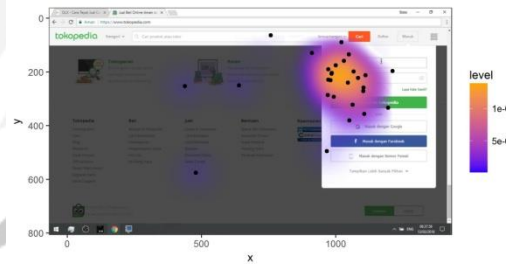
Heatmap Responden 14



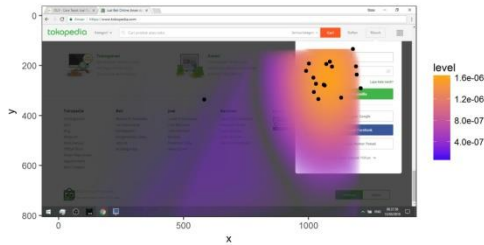
Heatmap Responden 15



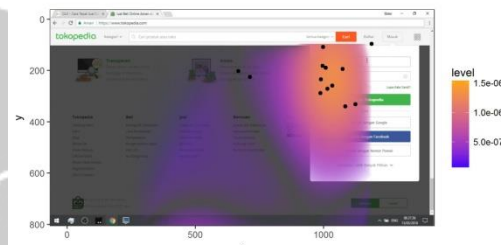
Heatmap Responden 16



Heatmap Responden 17



Heatmap Responden 18



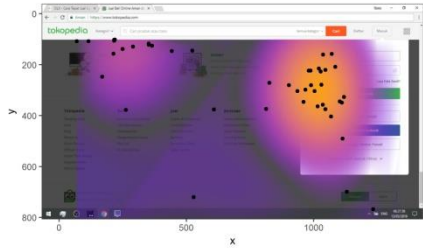
Heatmap Responden 19



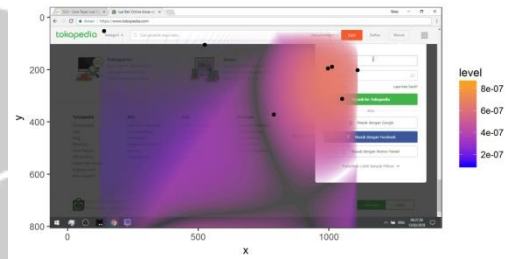
Heatmap Responden 20



Heatmap Responden 21



Heatmap Responden 22



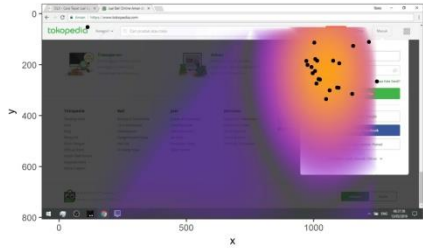
Heatmap Responden 23



Heatmap Responden 24



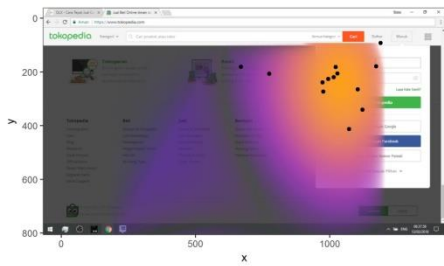
Heatmap Responden 25



Heatmap Responden 26



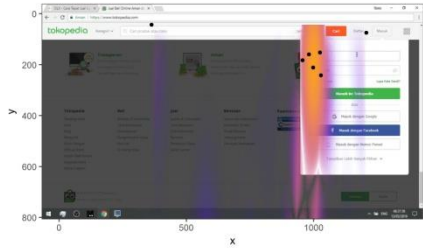
Heatmap Responden 27



Heatmap Responden 28



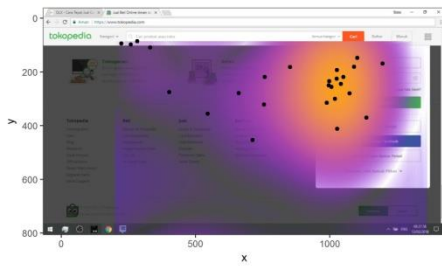
Heatmap Responden 29



Heatmap Responden 30



Heatmap Responden 31



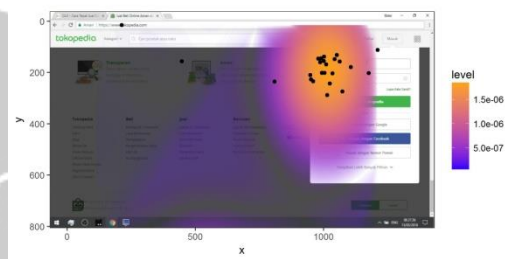
Heatmap Responden 32



Heatmap Responden 33



Heatmap Responden 34



Heatmap Responden 35



6-Lampiran Visualisasi Heatmap Tugas 3



Heatmap Responden 1



Heatmap Responden 2



Heatmap Responden 3



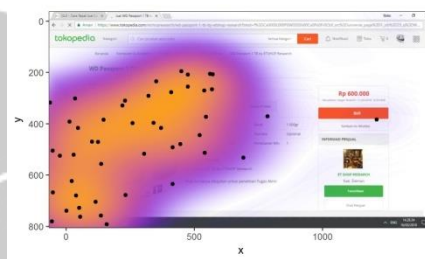
Heatmap Responden 4



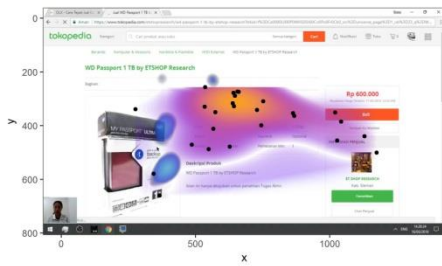
Heatmap Responden 5



Heatmap Responden 6



Heatmap Responden 7



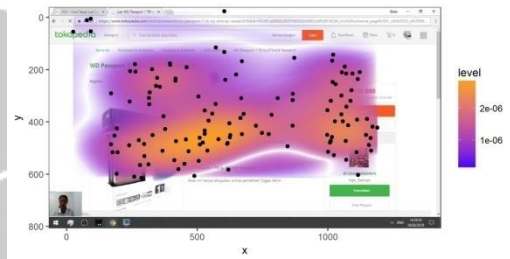
Heatmap Responden 8



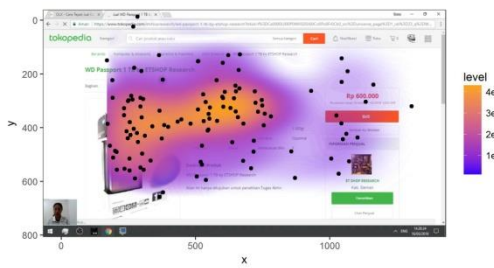
Heatmap Responden 9



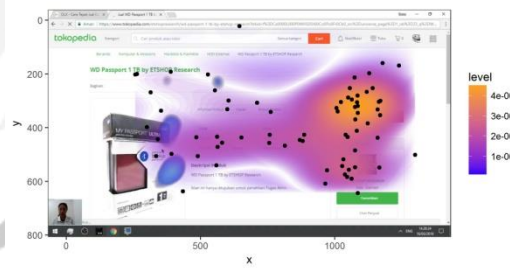
Heatmap Responden 10



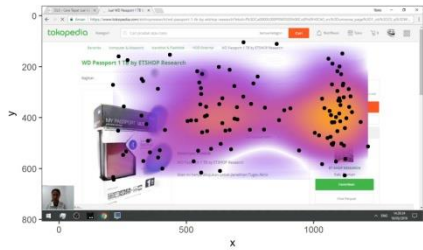
Heatmap Responden 11



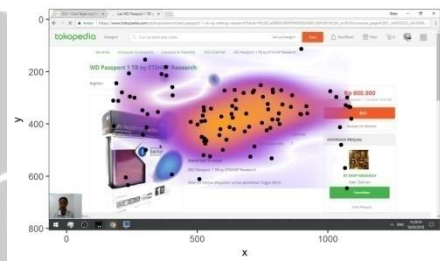
Heatmap Responden 12



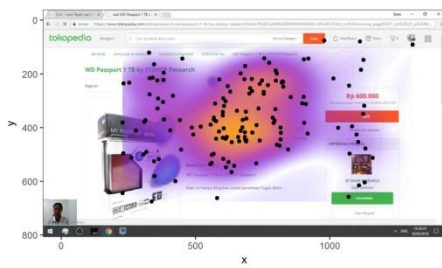
Heatmap Responden 13



Heatmap Responden 14



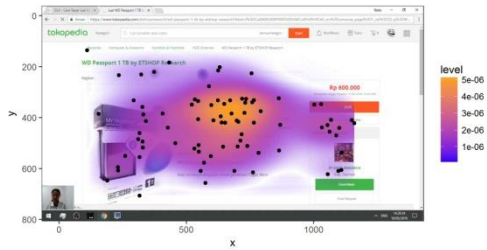
Heatmap Responden 15



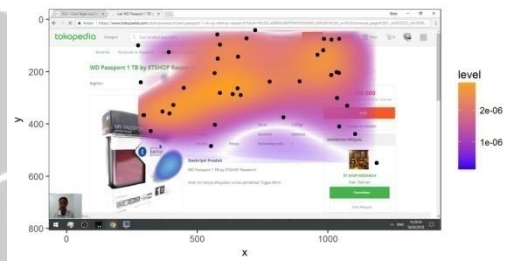
Heatmap Responden 16



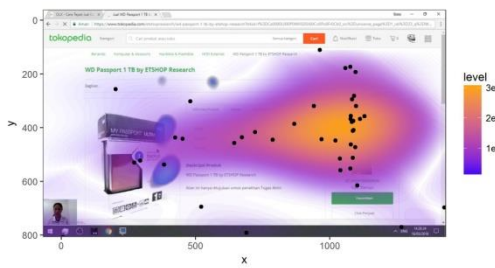
Heatmap Responden 17



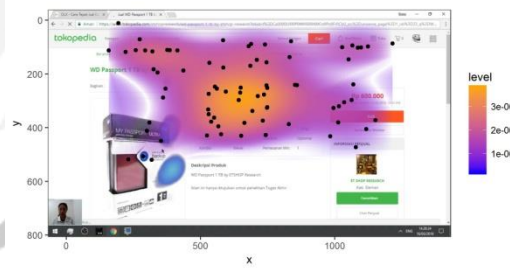
Heatmap Responden 18



Heatmap Responden 19



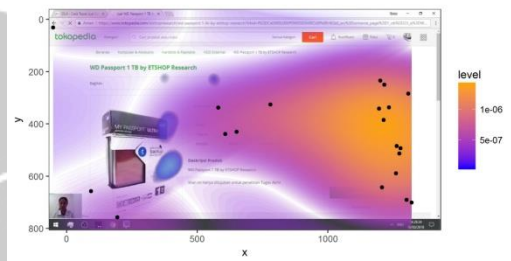
Heatmap Responden 20



Heatmap Responden 21



Heatmap Responden 22



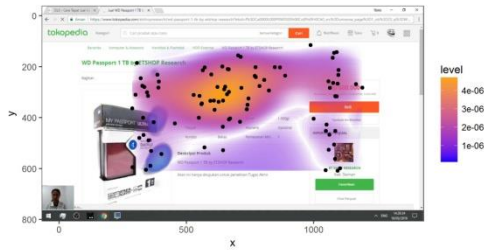
Heatmap Responden 23



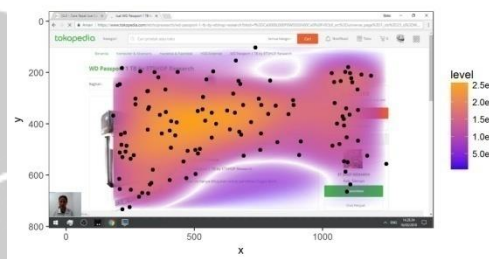
Heatmap Responden 24



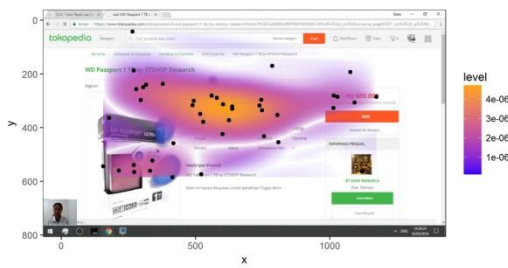
Heatmap Responden 25



Heatmap Responden 26



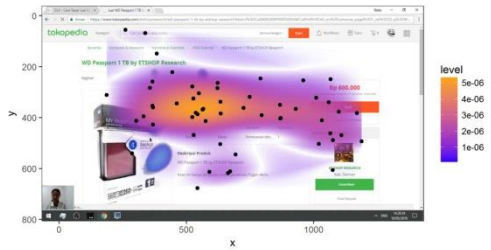
Heatmap Responden 27



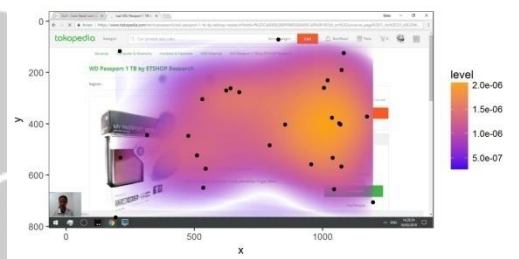
Heatmap Responden 28



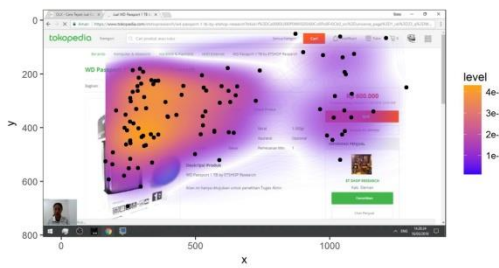
Heatmap Responden 29



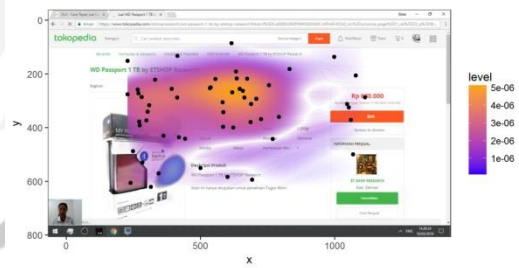
Heatmap Responden 30



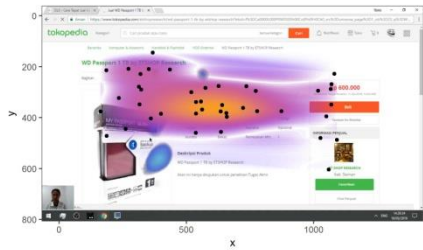
Heatmap Responden 31



Heatmap Responden 32



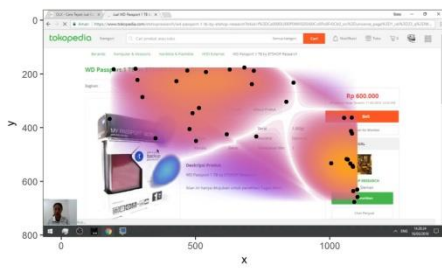
Heatmap Responden 33



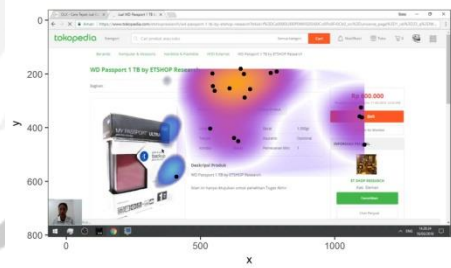
Heatmap Responden 34



Heatmap Responden 35



Heatmap Responden 36



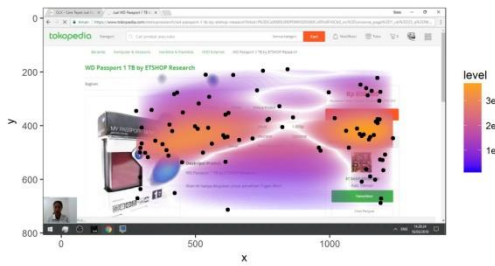
Heatmap Responden 37



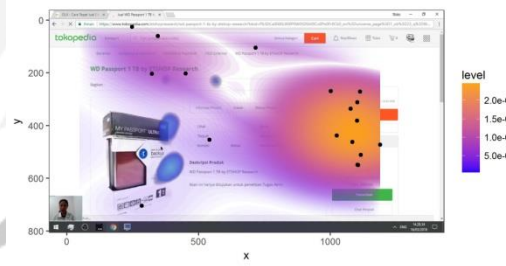
Heatmap Responden 38



Heatmap Responden 39



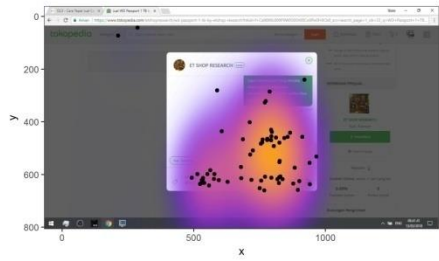
Heatmap Responden 40



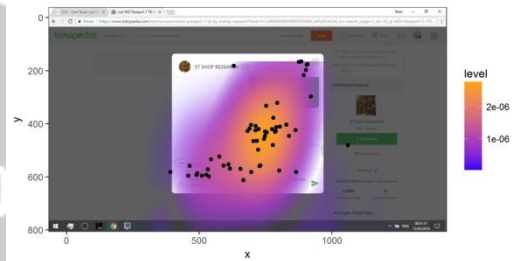
7-Lampiran Visualisasi Heatmap Responden Tugas 4



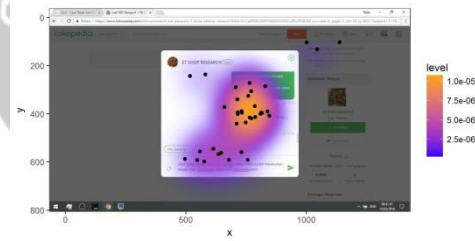
Heatmap Responden 1



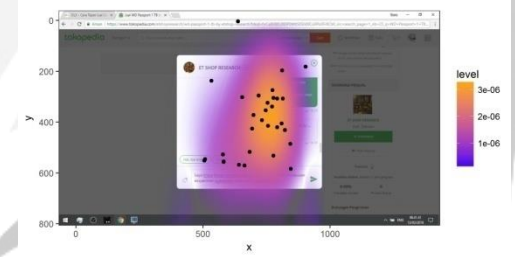
Heatmap Responden 2



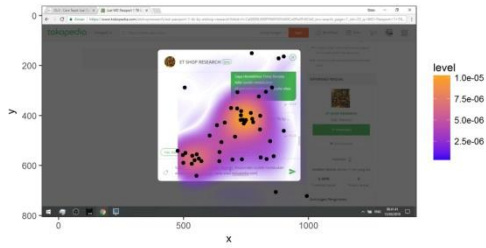
Heatmap Responden 3



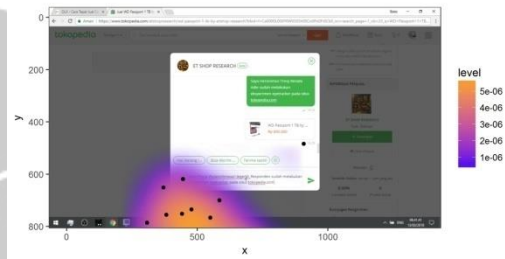
Heatmap Responden 4



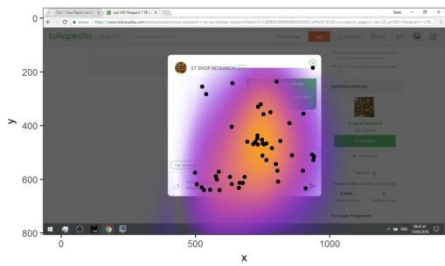
Heatmap Responden 5



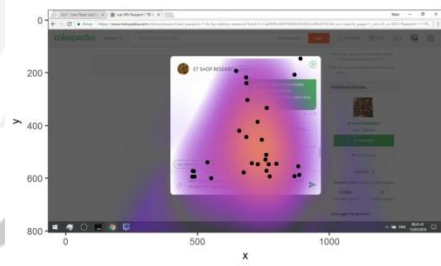
Heatmap Responden 6



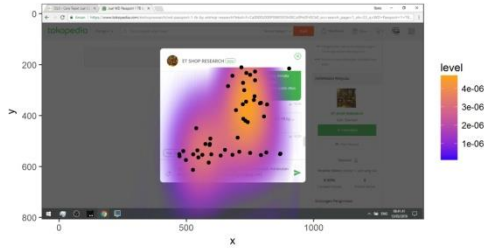
Heatmap Responden 7



Heatmap Responden 8



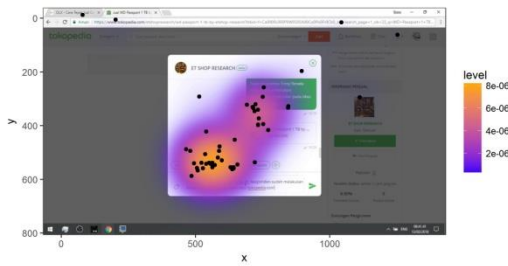
Heatmap Responden 9



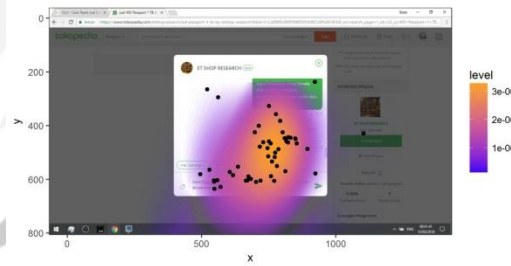
Heatmap Responden 10



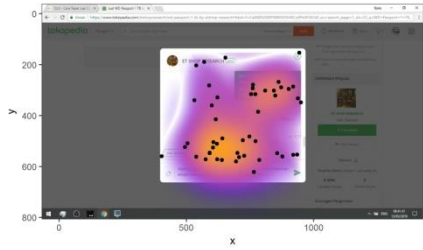
Heatmap Responden 11



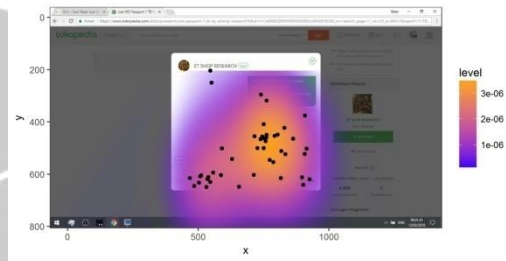
Heatmap Responden 12



Heatmap Responden 13



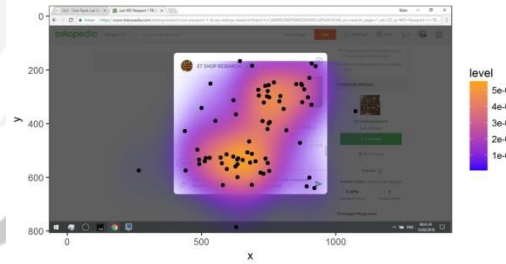
Heatmap Responden 14



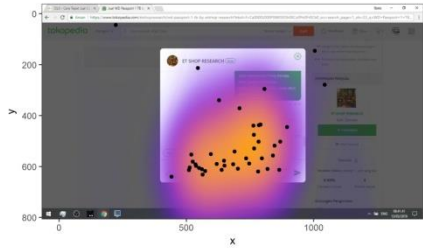
Heatmap Responden 15



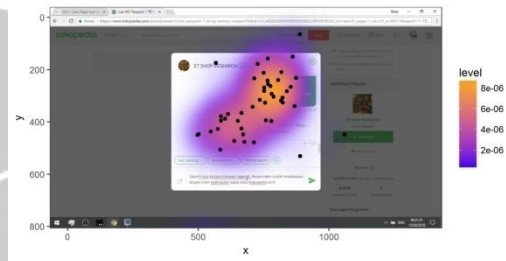
Heatmap Responden 16



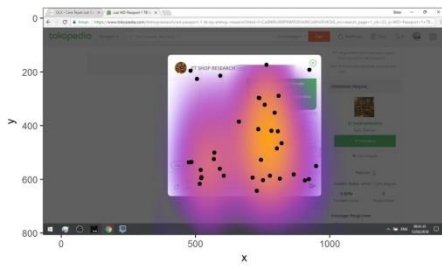
Heatmap Responden 17



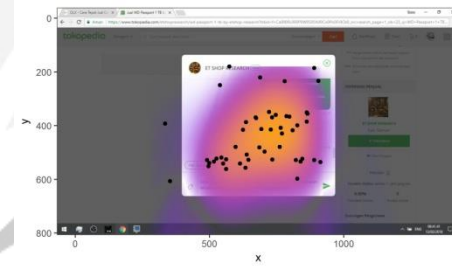
Heatmap Responden 18



Heatmap Responden 19



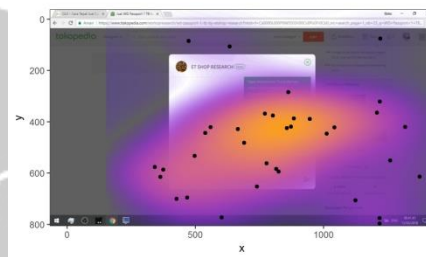
Heatmap Responden 20



Heatmap Responden 21



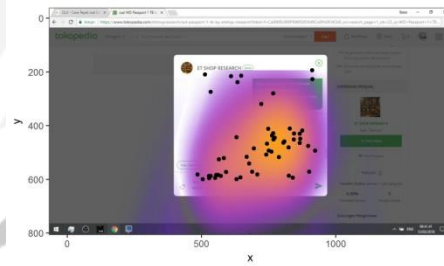
Heatmap Responden 22



Heatmap Responden 23



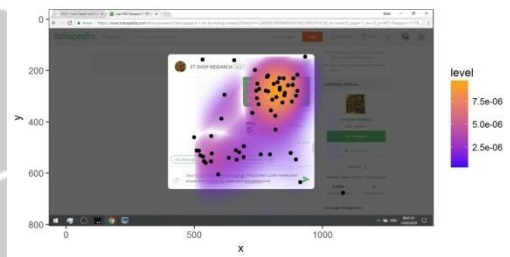
Heatmap Responden 24



Heatmap Responden 25



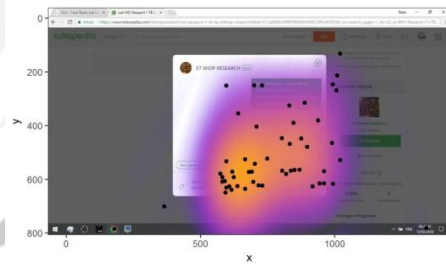
Heatmap Responden 26



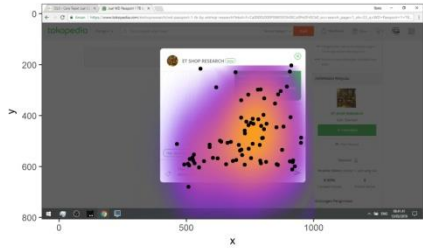
Heatmap Responden 27



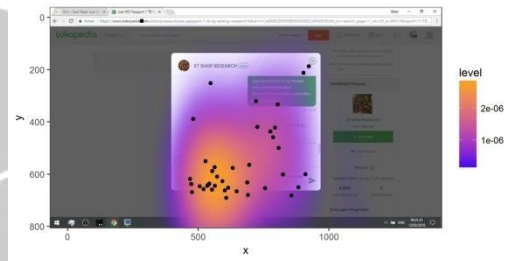
Heatmap Responden 28



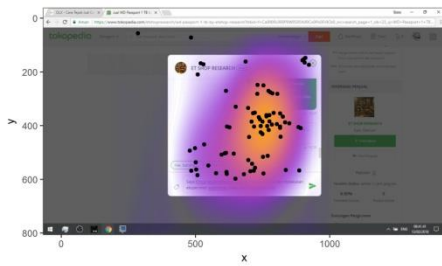
Heatmap Responden 29



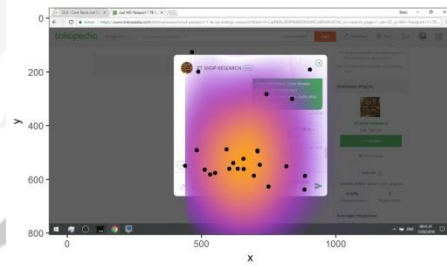
Heatmap Responden 30



Heatmap Responden 31



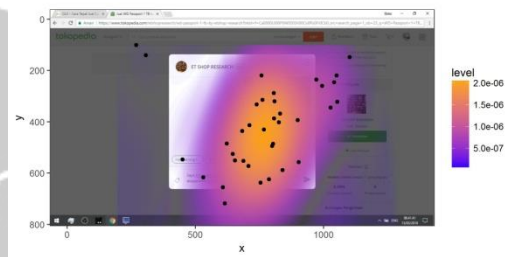
Heatmap Responden 32



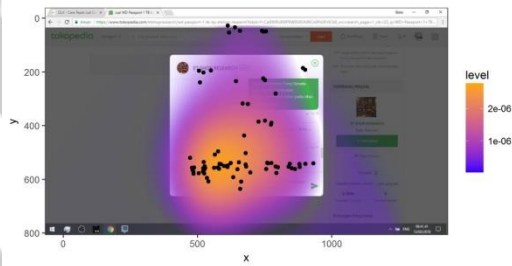
Heatmap Responden 33



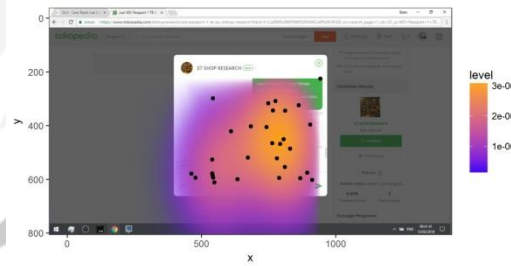
Heatmap Responden 34



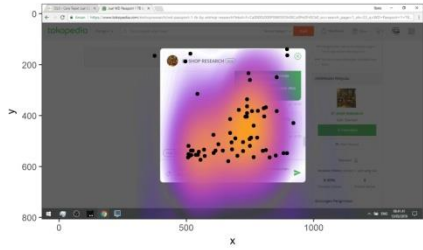
Heatmap Responden 35



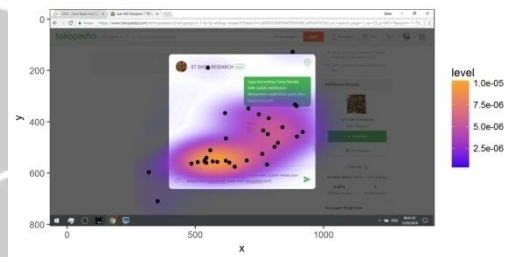
Heatmap Responden 36



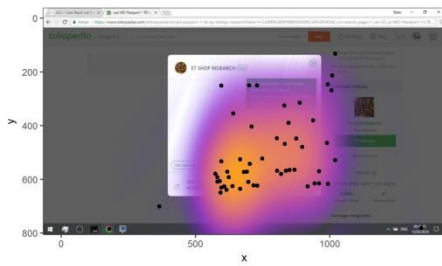
Heatmap Responden 37



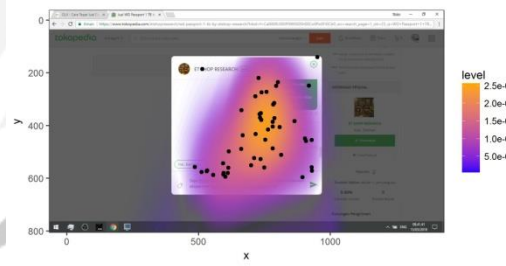
Heatmap Responden 28



Heatmap Responden 39



Heatmap Responden 40



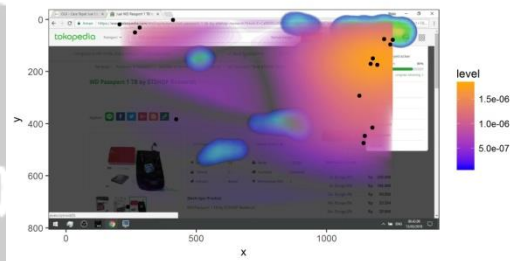
8-Lampiran Visualisasi Heatmap Responden Tugas 5



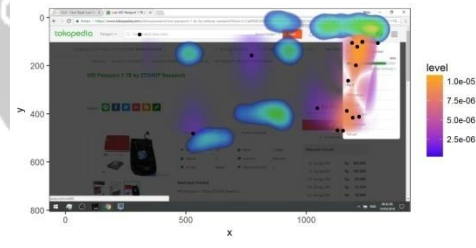
Heatmap Responden 1



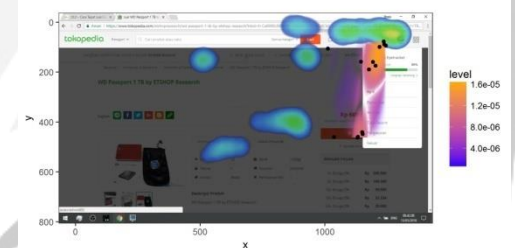
Heatmap Responden 2



Heatmap Responden 3



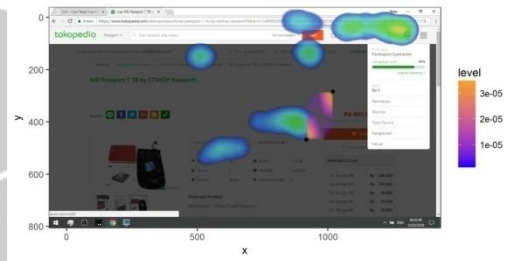
Heatmap Responden 4



Heatmap Responden 5



Heatmap Responden 6



Heatmap Responden 7



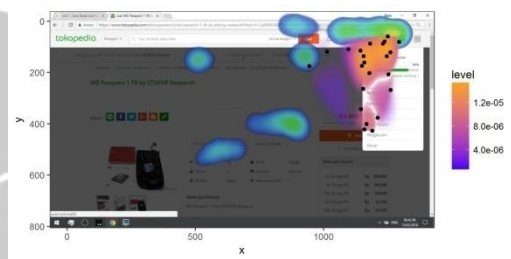
Heatmap Responden 8



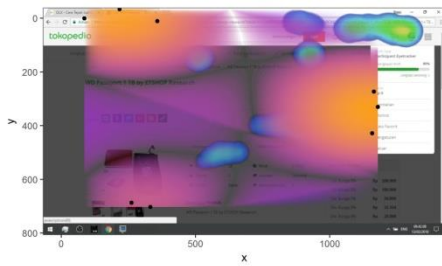
Heatmap Responden 9



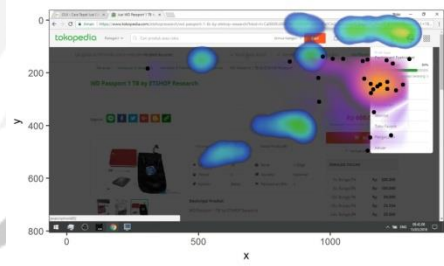
Heatmap Responden 10



Heatmap Responden 11



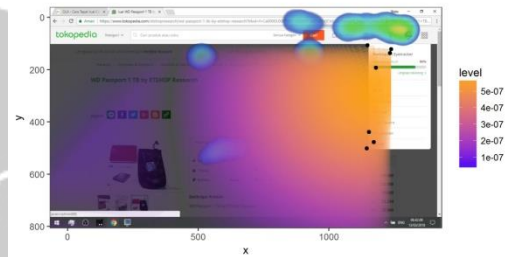
Heatmap Responden 12



Heatmap Responden 13



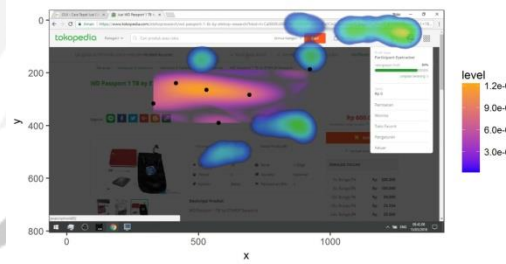
Heatmap Responden 14



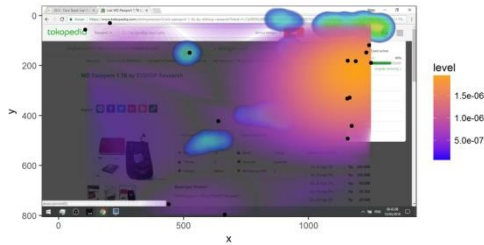
Heatmap Responden 15



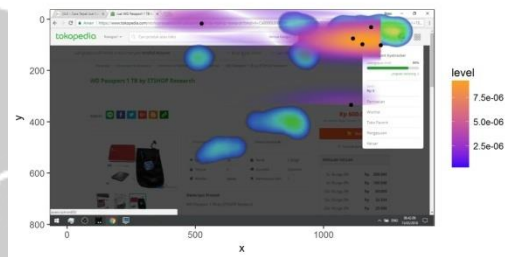
Heatmap Responden 16



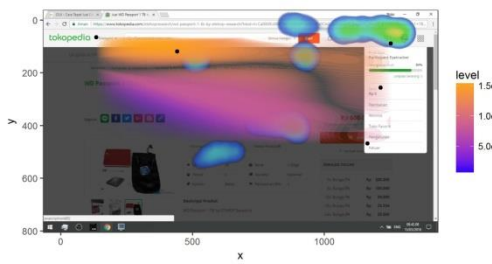
Heatmap Responden 17



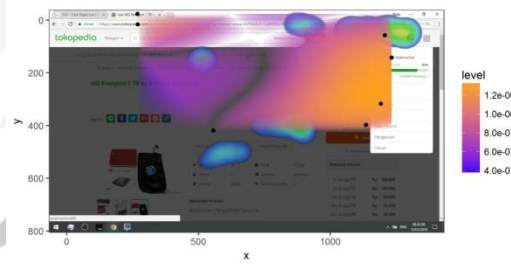
Heatmap Responden 18



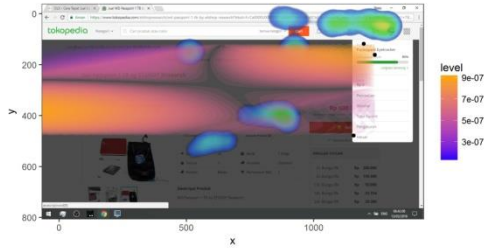
Heatmap Responden 19



Heatmap Responden 20



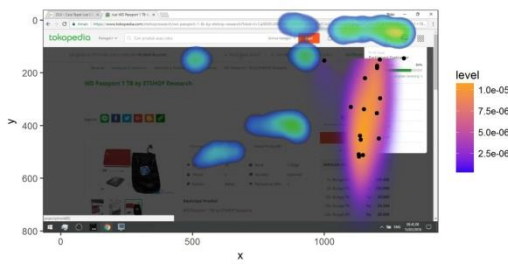
Heatmap Responden 21



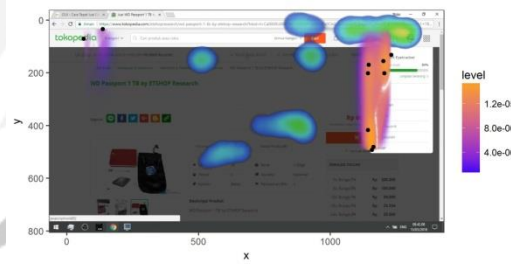
Heatmap Responden 22



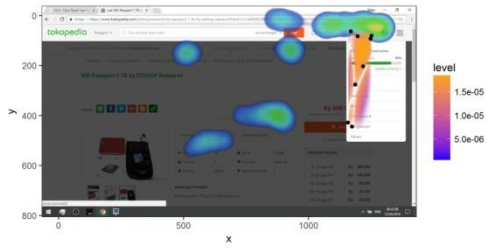
Heatmap Responden 23



Heatmap Responden 24



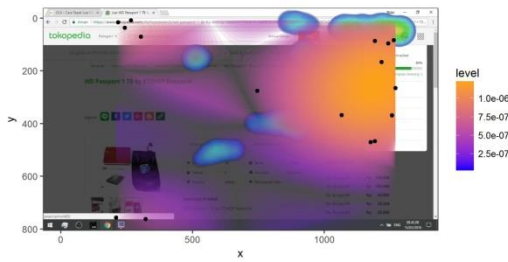
Heatmap Responden 25



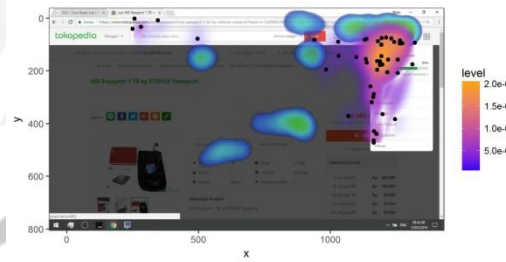
Heatmap Responden 26



Heatmap Responden 27



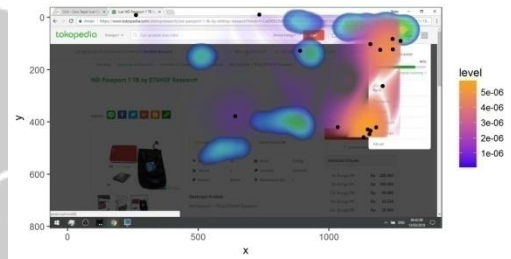
Heatmap Responden 28



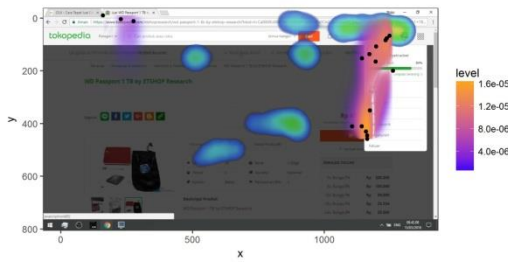
Heatmap Responden 29



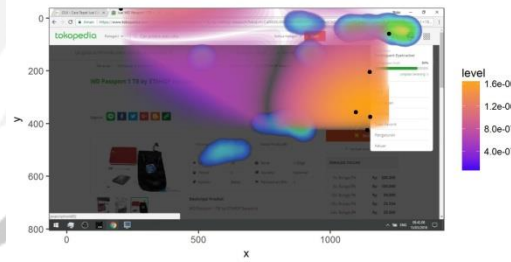
Heatmap Responden 30



Heatmap Responden 31



Heatmap Responden 32



Heatmap Responden 33



Heatmap Responden 34



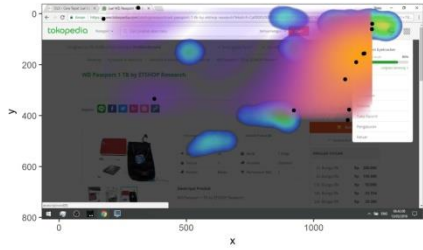
Heatmap Responden 35



Heatmap Responden 36



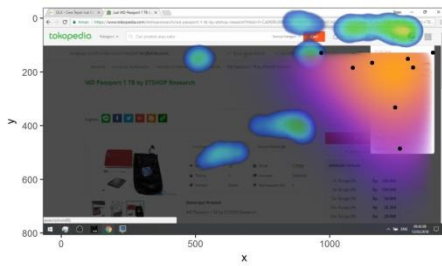
Heatmap Responden 37



Heatmap Responden 28



Heatmap Responden 39



Heatmap Responden 40

