

Stone Signs On-line Portal Solution

The Company

Stone Signs, established in 1974, is a Sussex-based family run business that provide signage services for estate agents for property that is on the market: For Sale or To Rent. They also provide signage for commercial property as well as event sponsorship.

The Situation

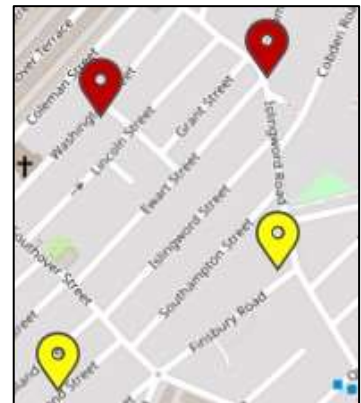
Stone Signs' current operational procedure involves estate agents making their sign request via email and telephone. These sign requests are then manually transferred to a paper, according to location, and it is this list becomes the job itinerary.

The founders of the company are looking to retired and hand-over the entire business to their son. The current manual element of the business's operational procedure will prove too time-consuming for one individual to manage on top of the day-to-day placing of signs.

The Goal

To create an on-line portal where estate agents can make and manage their sign requests. Each sign request will be represented by a coloured map pin. Different branches will be represented by different coloured pin drops.

With the sign requests in the one centralised location, the data can easily be filtered and downloaded to form the job itinerary.



The Project Deliverables

- Functional design and documentation of business processes.
- Interview and selection of appropriate Developer.
- User acceptance testing for all user types: for estate agents as well as the administrator.
- System administration user account set-up, circa 100 branches.
- Composition of user guidance documentation, client comms and company slogan.
- Change management for users including several weeks of early life support.
- Design and implementation of manual invoicing process, incl. invoice numbering system formulation.
- Overseeing of Phase 2 development of automated invoicing process.
- On-going system support including user account creation, invoicing and reconciliation, plus management of additional developmental phases.

The Journey

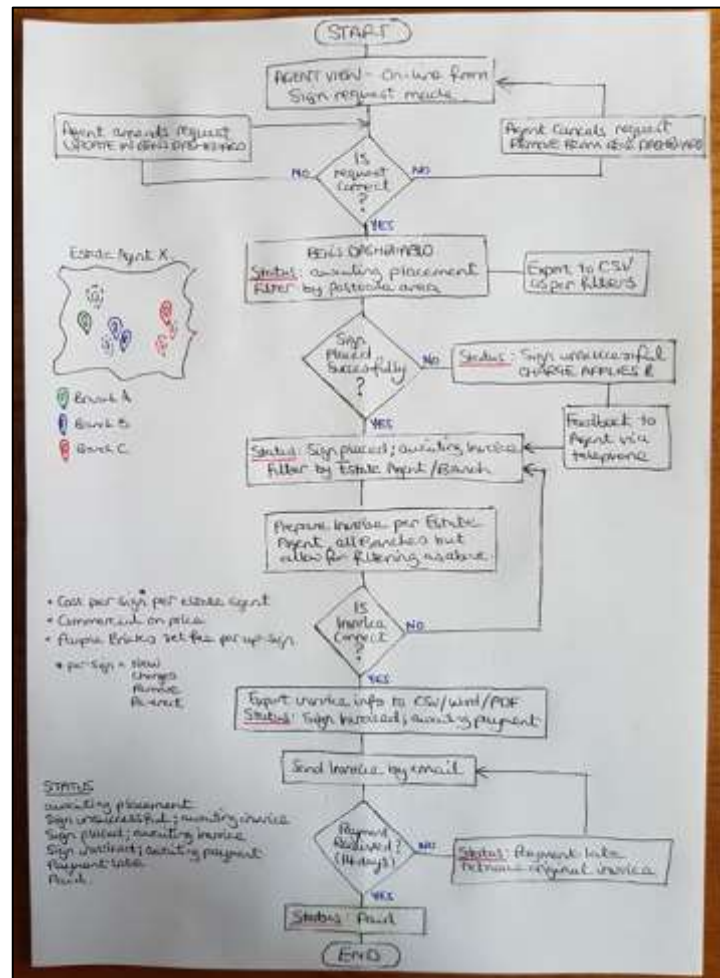
In May 2019 the owner of Stone Signs, Ben Stone, a life-long friend, approached me to ask if I could assist in streamlining his business processes in preparation for his parent's retirement. After documenting how the business operated, it became obvious that an on-line solution would help to remove much of the manual element of the business's workflow, as well as enable data validation checks to be introduced. With all the

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data in one centralised place, information could be easily managed and exported. The estate agent, instead making their request via email, could provide the same information via an on-line portal.

Ben sourced a web developer who had come recommended. We met with him in June 2019 and relayed our requirements. He agreed to everything and questioned nothing. A number of meetings took place between June and August. The relationship began to breakdown around the testing phase where it became apparent that the code he had written, which may have been suitable for navigating a website, was not robust enough to ensure the correct operation of a web application. It became apparent that the developer had not factored into his schedule, the additional time required for refining the code, and he became increasingly difficult to contact.

In September 2019 we met with two further developers. We had increased our budget and refined our requirements. Developer **A** did not ask any questions, or provide any feedback on his thoughts or plans, and there was no commitment to guaranteeing the code. Developer **B** on the other hand, asked plenty of questions and provided us with a 14-page specification to ensure that the communication between both parties was effective, he also guaranteed his code for 12 months. We chose to proceed with Developer **B**.



Development work began in October 2019, and we were able to start UAT by mid-November. Supporters of Ben were engaged to participate in volunteer testing groups, arranged around normal work commitments. These proved very useful for the preliminary testing stages. However, as the testing became more involved and intricate, the volunteer testing members dispersed, and interest slowly dwindled, Ben included.

What followed was the most challenging phase of the assignment: the limbo stage, where significant time and money had been invested in the project which was incomplete and not fit for purpose in its current condition, i.e., without adequate testing, the Portal was in danger of hindering the business instead of improving it. There was resistance from the business founders (Ben's parents) which fed down through Ben creating a repressive environment. Added to which my involvement was still being provided on a zero pay voluntary basis: the most challenging part of all!

With a point to prove that the Portal solution could be a success, coupled with the resistance to not waste the time and money already invested, I pushed the project over the finish line. I completed the testing, feedback & re-test cycle, provided changeover communication to estate agents, wrote supporting documentation, and enlisted the help of my sisters to set-up user accounts and provide early life support.

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The Portal went live on 2nd January 2020, and was received warmly by the majority of users. The supporting training guides helped to summarise the intuitive design of the Portal. Some agents required a little more persuasion with regards to using the Portal for their sign requests, preferring to send emails rather than get to grips with the new web application. It was at Go-live we discovered that the Portal was not compatible with the ageing browser: Windows Explorer.

The Benefits

BEFORE: Sign requests are submitted by the estate agent via email and telephone call in no set format with no minimum data requirement. This gives potential for a high probability of miscommunication and error.

AFTER: Sign requests are submitted via an on-line form which contains mandatory fields and postcode validation checks, reducing the probability of missing information and error, as well as guaranteed postcode existence.

*There is no validation however to confirm that the postcode and the address pair.

BEFORE: The Job itinerary is assembled and handwritten based on emails and phone calls received. Sign requests are grouped according to location.

AFTER: The Job itinerary is generated by filtering according to location, and Portal data exported to CSV. The CSV is automatically ordered by postcode based on a starting location. The Portal can equally be used as an on-site work tool although a hardcopy is more suitable for poor signal areas.

Execution Order by Postcode	Agent	Branch	Action	Sign	Address 1	Postcode	Additional Information	Completed
1	Homes Residential	HomesResidential_@GoringSales	Change Sign	Sold STC	Top Floor Flat, 18 Gorse Avenue, Worthing	BN14 9PG		
2	Ham & Co	Ham&Co_@Broadwater	New Sign	Sold STC	317 South Farm Road, Offington, Worthing	BN14 7TL	Corner plot property.	
3	Ham & Co	Ham&Co_@Worthing	Remove	Sold STC	17 Offington Avenue, Worthing	BN14 9FE	please bring in	
4	Michael Davies	MichaelDavies_@WorthingSales	Remove	For Sale	88 Lavington Road, Worthing	BN14 7ST	this board probably isn't there anymore - please check	
5	Michael Davies	MichaelDavies_@Findon	Change Sign	Sold STC	3 Warren Close, Worthing	BN14 9DJ	remove Winkworthing and change to Sold please	
6	Joshua Steel	JoshuaSteel_@Findon	Re-Erect Sign	Sold STC	47 Offington Avenue, Worthing	BN14 9PJ	Hang high	
7	Jim & Jim	Jim&Jim_@Worthing	New Sign	For Sale	Flat 8 Penhurst Court, Grove Road	BN14 9DG	Facing the green please	
8	Badger & Sons	Badger&Sons_@Broadwater	Change Sign	Sold STC	52 Upper Brighton Road, Worthing	BN14 9HT		
9	Joshua Steel	JoshuaSteel_@Worthing	New Sign	For Sale	8 Factory Gardens, Worthing	BN14 7TE	two boards on corners	
10	Michael Davies	MichaelDavies_@Findon	New Sign	For Sale	Byways, Fifth Ave	BN14 9NL	Garden flat slip please	

BEFORE: The completion of each sign request is manually recorded on the Job itinerary. The verification of a successfully completed sign to the estate agent, is not feasible, feedback is only provided in the event sign placement is unsuccessful.

AFTER: Estate agents can see in real-time via the List View when each sign request has been completed.

Branch	Sign	Address	Status	Controls	Requested	Completed
Houses4Sale @Broadwater	Sales New Sign For Sale	99 Offington Court BN14 9PF	Completed Not Invoiced	  	08/01/2022 12:45	08/01/2022 16:12

BEFORE: For signs already on-site, all changes to signs require the same level of information to be provided as a brand-new request, resulting in an element of 'duplication of work'.

AFTER: The Portal enables changes to be made to existing signs via a couple of button clicks to move the sign to the next stage, e.g., from **For Sale** to **Sale Agreed**.

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BEFORE: Invoices are manually calculated, typed and posted, the full process taking 7 days to complete.




AFTER: The invoicing process in Phase 1 contained a significant manual element despite the charge data being readily available to download to CSV. The CSV was formatted, and net, VAT and gross charges calculated using a macro. The information was then transferred to a Word document (client invoicing template) before being converted to PDF and emailed out. The “manual” invoicing process took 2 working days to complete. Phase 2 development saw the introduction of the automated invoicing process which is based on the procedure designed in Phase 1. Completion time is reduced to between 1 and 2 hours.

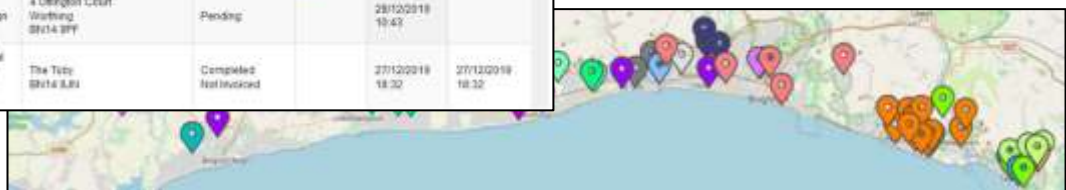
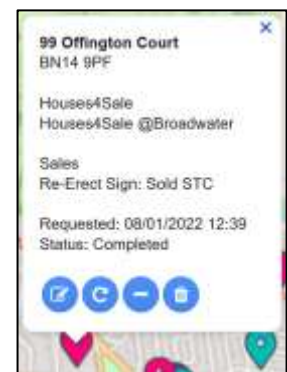
BEFORE: Invoice payments, normally made by cheque, are verified via monthly bank statement, and recorded in the business log book when paid. Invoice reminders are sent by post or telephone.

AFTER: The new Stone Sign business account is now managed on-line meaning that invoice payments can be checked at any time. Clients are encouraged to pay electronically. Paid invoices are marked in the Portal with the Paid Date. There is facility to send an “unpaid invoice” reminder via the Portal, however a more personal email touch is currently preferred.

BEFORE: It is the responsibility of the estate agent to keep track of where signs are located and at what stage of the selling/letting process each sign is displaying.

AFTER: The Portal provides up-to-date sign information on each sign stage as well as the location. Detailed information is available via the List View. The Map View is useful for viewing locations at a glance, and additional sign information can be viewed by clicking on the map pin (see right).

Branch	Sign	Address	Status	Controls	Requested	Completed
Houses4Sale@Worthing	Sponsorship New Sign x 10	Broadwater Green BN14 9DB	Pending	 	29/12/2019 11:32	
Houses4Sale@Worthing	Commercial New Sign 5-Board Conting Sign	28 Lyndhurst Rd BN11 2DF	Pending	 	29/12/2019 11:33	
Houses4Sale@Chichester	Sales Change Sign Sold STC	4 Offington Court Worthing BN14 9PF	Pending		29/12/2019 15:43	
Houses4Sale@Chichester	Commercial New Sign 5-Board Sold STC	The Toby BN14 8JH	Completed Not Invoiced		27/12/2019 18:32	27/12/2019 18:32



The Outcome

The Portal has proved a successful way in which to conduct business, and has taken much of the administrative manual labour out of the business process, as well as streamlining communication between parties. Clients are comforted by the contemporary approach, and as a result, Stone Signs has remained competitive within its market.

Neil Hyde, Director of the Goring Branch for Michael Jones says:

“I know my office have really enjoyed using the portal. Makes life easy for us and it keeps an accurate record of where our boards are up. When you change the status of a board it picks up the address which again makes it easy to use.”

The Links

- ☐ On-line Portal Solution Development: [GitHub - HannahDilley/Stone-Signs-On-line-Portal](https://github.com/HannahDilley/Stone-Signs-On-line-Portal)
- ☐ Portal Welcome Page: <https://stonesigns.app/>