A quest for clarity

Solving information overload with neuroscience

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This is a research paper on solving the problem of information overload in the digital era.
Visit our website https://RosyBoa.co for information about the solution

ROSYBOA

Finding clarity in a digital world

The digital revolution has been a double edge sword. We were promised an enhanced life, with all this free time to spend on personal pursuits and leisure. Instead, most of us are drowning under an ever-increasing amount of information. Instead of feeling empowered to lead the life we dream of, our scattered attention has become the unwilling victim of the digital society.

There is no turning back. New technologies will continue to disrupt all sectors for the foreseeable future, and by embracing digital transformation, businesses will continue to open new opportunities. We have to cope with information overload. But how? At risk is people's wellbeing. Work-related stress severely impacts productivity[1], is responsible for over a third of work-related health issues, and is the number one reason for work days lost.

Why all the stress?

How did the current working environment become so stressful? How come we didn't see it coming? According to "The social economy: Unlocking value and productivity through social technology", published in 2012 by the McKinsey Global Institute[2], during an average workweek we spend 28% of our time reading and answering email, 19% searching and gathering information; 14% communicating and collaborating internally, leaving just 39% to work on role-specific tasks. Workers face distractions and interruptions throughout the day. While being continually connected can be a great benefit, it is difficult to handle the unannounced multichannel flows of information.

Fear Of Missing Out (FOMO)

Fear of missing out[3] (FOMO) is a modern syndrome that reflects the anxiety we experience that something important is probably happening elsewhere. It is exacerbated by the expectations of others that we are required to know what's happening and to be available to deal with the asks or face the consequences. Such silent anxieties reduce our productivity and flow.

1. Health And Safety Executive http://www.hse.gov.uk/statistics/dayslost.htm
2. McKinsey Global Institute https://www.mckinsey.com/~/media/McKinsey/Industries/High%20Tech/Our%20Insights/The%20social%20economy/MGI_The_social_economy_Full_report.ashx
3. Psychology Today https://www.psychologytoday.com/us/blog/ritual-and-the-brain/201804/the-science-fomo-and-what-we-re-really-missing-out

Multitasking is a myth

While we may think we can multitask, neuroscientists have already shown that multitasking is a myth[1]. We are not able to perform tasks simultaneously. Instead, we stop doing one and turn to another - it is called task switching. And this process takes a considerable toll. Neuroscientists are now saying that task switching or unconsciously switching attention between tasks is highly inefficient[2], costing 61% of our time and energy!

Why our brainpower limits us

Much of the problem relates to our innate inability to assimilate and process all the diverse information we face every moment of the day.

The human brain is a wonderful organ. Current estimates suggest it can store one petabyte[3] (a quadrillion bytes) of information. However, the bandwidth that allows us to access and apply that information is limited. Estimates vary, though it appears that the processing capacity of our conscious mind is only 120 bits per second[4].

While much more goes on below the surface in our unconscious minds, it is our limited conscious bandwidth that makes task switching so tricky. We have just about enough bandwidth to follow two simultaneous conversations, but few people on the planet can follow three.

1. Psychology Today https://www.psychologytoday.com/gb/blog/creativity-without-borders/201405/the-myth-multitasking
2. Psychology Today https://www.psychologytoday.com/gb/blog/brain-wise/201209/the-true-cost-multi-tasking
3. Live Science https://www.livescience.com/53751-brain-could-store-internet.html
4. Fast Company https://www.fastcompany.com/3051417/why-its-so-hard-to-pay-attention-explained-by-science

There are two kinds of task switching: conscious and unconscious. Our ability to do either is a measure of our cognitive flexibility. Naturally, some people are significantly better at it than others. Neuroscientists have used fMRI (functional magnetic resonance imaging) brain scans to identify the brain networks involved in the process and now believe the most important of these is the prefrontal cortex, which is crucial in planning complex tasks, decision making and expressing personality.

Attention is a currency

The true cost of task-switching comes from context-switching. We need to PAY ATTENTION to make sure we are in the right place using the right information.

Because mistakes easily creep in when switching context (wrong client, wrong price, wrong name...), we need slow down to filter and sort information each time.

For businesses, that translates into real money. Project teams work far more efficiently when they are focused and inside the zone than in switching mode. While switching tasks costs significant time, the available brain bandwidth is used to filter and sort information in order to put it into a context appropriate to the task in hand.

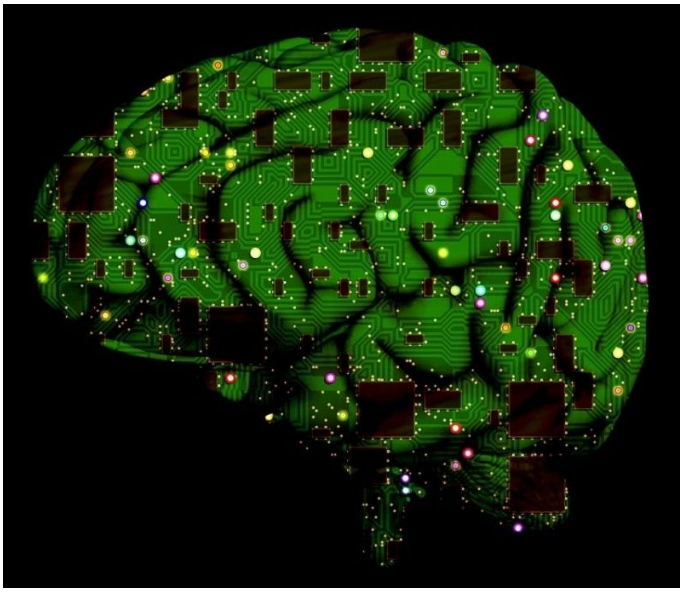
This is a matter of national and international concern resulting in a massive loss of productivity for companies and nations. As mentioned in the opening paragraph it results in stress, exhaustion, and burnout and takes a significant toll on public health[1].

On the other hand, we are asked to do more jobs within our job than ever before. For instance, technology means we don't need an assistant to book our flights and hotels and other administrative functions; we are now expected to do it ourselves.

1. Fast Company https://www.fastcompany.com/90282735/the-workplace-is-killing-people-and-nobody-cares

Think like a brain

Fortunately, things can be improved and a solution has now been created to help our brain cope with so much information. The discovery started with observing how the brain works, then reorganising information to suit the way the brain processes, retrieves and uses information.



When information reaches your brain, it will read it as an image, thought, and feeling. It frames, zooms, edits, blurs, filters, composes, records and tracks everything that is happening, acting like a movie production crew. It then interprets what is happening through your senses, inserting judgement, meaning, and context. That experience is then saved as a network of linked neurons, very much like Christmas lights, associated with a story that holds up together. We call that information a memory.

Each time you try to remember something, your brain is searching for the original Christmas light to display. But you end up retrieving only a partial image of the original scene. Your brain will then actively fill the gaps to create a new scene that holds together. Every time you open a memory, you rewrite it. And every time, some things will be omitted, changed, others added, while your brain merges all the stories together[1].

As pointed out above, due to our limited attention bandwidth of 120 bits per second, the brain can retrieve and make sense of only a small amount of information at a time. To maximize its retrieval efficiency, the brain categorises and compresses information into smaller sized blocks that are easier to retrieve thanks to cues, the most powerful of which are visual. For instance, we recognise places and people we have seen much better than we recall words. And from that cue, the brain will reconnect to the experience, conversation, emotion, retrieving a much larger memory. This economical system allows us to save processing power, which can be used to think, connect new ideas and create new things.

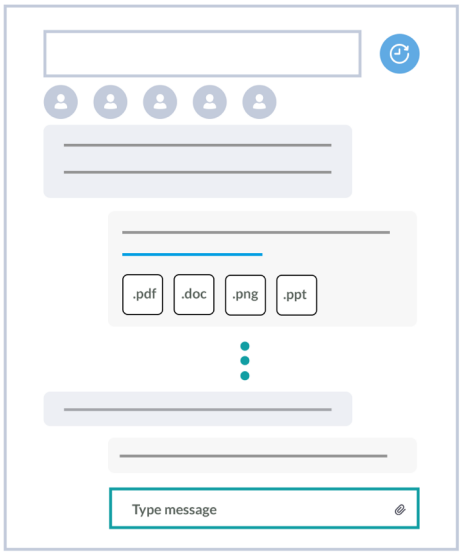
1. Daniel Levitin, The Organised Mind (2014)

The brain is also very good at pruning information we no longer need. That's why we forget very quickly, about 40% of what we learned in 20 minutes and 77% of in six days. Knowing that pattern, it is much more efficient for our brain to recall a typical place where things are kept than to remember its content.

Introducing Visual Aggregation Method For Ordered Sequences (VAMOS)

Those observations have led to the design of the patent-pending VAMOS (Visual Aggregation Method for Ordered Sequences). The Method helps you get back into context quickly when switching tasks.

It allows everybody to be on the same page instantly. Every team member can access the same streamlined information. Anyone can contribute directly in the flow of the conversation, accessing all the documents and links they need in one place in a referenced order.



A streamlined conversation on a single topic with VAMOS. See shared comments, files and links in a chronological order.

Introducing Key Actions Framework (KAF)

Alongside VAMOS, we have designed a simple framework for project management called Key Actions Framework (KAF). Essentially, a project is the sum of all Key Actions. When KAs are done, the project is done.

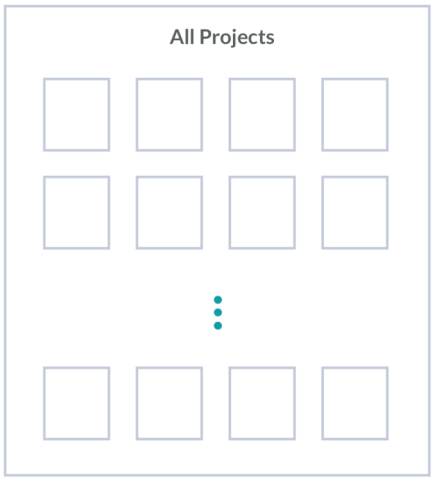
Let's take an example. If you organise a festival, Key Actions would include book a venue, invite guests, send the programme, arrange catering, buy insurance... At the beginning of the project, all the KAs are marked "To Do". When people start making calls, getting quotes, writing drafts, Key actions will be "In Motion". When one Key Action is finished, you directly set its status to "Done". Once you open the KA, you get the conversation, files and links inside that Key Action, not in other folders or channels.

A project is the sum of its Key Actions in KAF. See status of Key Actions change across the life of the project

Leveraging the visual brain

Instead of requiring you to process vast amounts of information to recollect the pieces every time you switch tasks, we provide you with external triggers, such as pictures and previews of conversations, to help you match those with your memory and find information much faster.

Because conversations are curated, your brain only needs to find the right location to see information on a specific subject. As a result, you never have to remember what was said or decided; all you need to do is find the right project and find the right conversation, and do a quick keyword search in that location.



A visual dashboard is the easiest way to navigate through all your projects

Introducing RosyBoa

RosyBoa was intentionally designed to be clutter-free. To help you minimize the noise, it organises conversations, curates information and reduces the time to navigate between tasks. It rests on only three screens, to allow your brain to visually dip in and out of any project at will. The screens are designed for simplicity and clarity to give your brain room to think. The biggest value rests in what you don't see!

The biggest value rests in what you don't see

For teams and individuals, this significantly reduces the time spent finding information, reduces the effort needed to understand that information, and reduces consequently the amount of errors that could creep in.

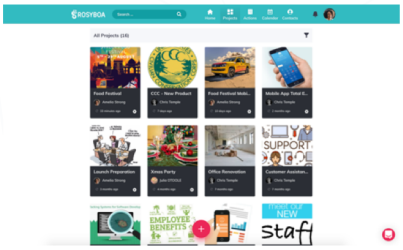
Thanks to VAMOS, conversations are clean and chronological, free of clutter and noise. Clarity comes at no extra neural cost since all you do is have a conversation, in the right location.

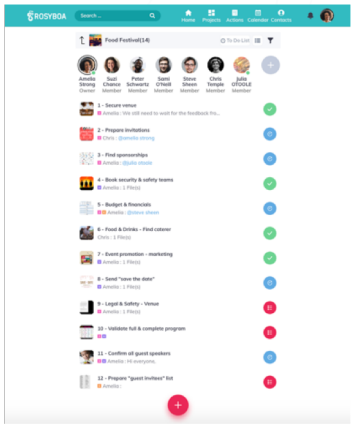
Using VAMOS, KAF and a visual dashboard, RosyBoa becomes a self-curated information system providing vision, clarity and meaning for the whole team. Everyone can see where the project is heading (Key Actions) and what happened (conversations) at the right level of information in the right context, as if reading a story.

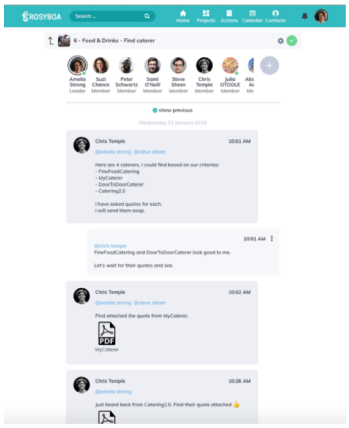
Using RosyBoa increases empathy as people communicate through conversations, show what they see using screenshots, give insightful comments directly in the context of the conversation. When people understand the situation better, they are also more able to participate in the conversation to help the team complete the Key Action.

Finally, trust and transparency are improved, as Key Actions become a single source of "truth", providing the same information and conversations which everyone can rely on.

At the end of the project, the shared conversations become the repository of experiences that will form the collective brain on that project.







Three screens to zoom in and out at will.
An example of a RosyBoa dashboard, project and key action.

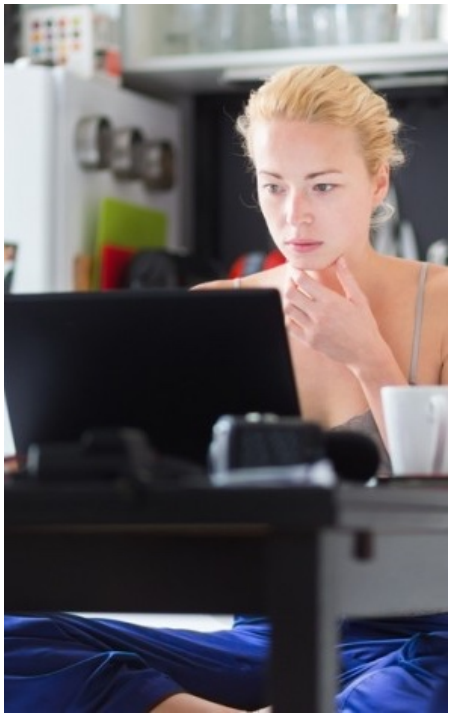
What kind of teams is RosyBoa best for?

- ***Growing and remote teams*** **-** An essential advantage of RosyBoa is that project newcomers joining the project part way through can quickly access all the previous project information in a single location in a conversation format. This hugely reduces the learning curve allowing them to get up to speed almost immediately. As the data is accessible on desktop, mobile, and tablet, it is an excellent solution for remote and freelance workers.

- ***Cross-functional teams working on complex projects with a tight schedule*** **-** RosyBoa is an excellent solution for complex projects running on a tight timescale. Convert your GANTT chart into Key Actions, and see each action progress by monitoring the status of actions.

- ***Ad-hoc teams built around a vision*** **-** RosyBoa eliminates the hazy guidelines that compromise many projects where people have never worked together. Here the Key Actions Framework is visible to all members, helping the team maintain their focus on actions.

- ***Teams requiring active Knowledge Management*** **-** All information is retained inside each project's Key Actions, enabling teams to return and read old conversations years later. RosyBoa becomes a repository of all previous projects, providing a living memory of stories, templates, and trials. It makes it easy to learn from past iterations, prevent a repeat of past mistakes and apply lessons learned to new projects.



Remote teams working on complex projects
need to share vision, clarity and the right level of information

Final notes

Designed to protect your attention in the digital age, RosyBoa[1] is unequivocally the fastest way of pulling out and using information.

- By creating a collective memory, it counters memory deficiencies of individuals and groups.
- By sharing a vision of project success from the start, it helps to build great teams, defined as a group of individuals working together as one to achieve a vision.
- By connecting a network of neurons into a collective brain, RosyBoa is the perfect tool to help you go from win to win.

*To use RosyBoa on a **30-day free trial**.*

- *Download the app on **google play** or **app store** or go to **app.RosyBoa.co***
- *For enquiries, contact **support@RosyBoa.co***
- *For more information, visit our website **https://RosyBoa.co***

1. The rosyboa is a small and agile pet snake that never misses its target.