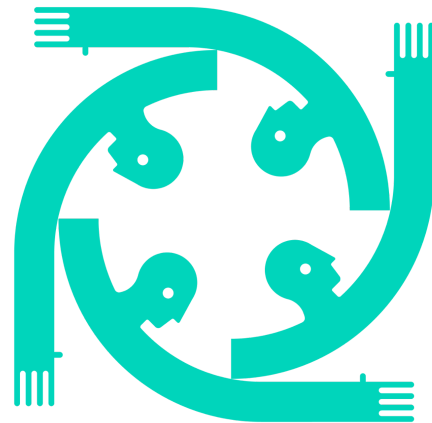


“At the office” and “home office” collaborative work assessment - Pocket App



WORKSAPIENS

• COGNITIVE ERGONOMICS
& WORK MANAGEMENT •

User's guide - ENG

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Summary

- **Objective:** Worksapiens is a collaborative “*Pocket app*” (i.e. quick to use and manage) that helps teams assess their adaptation and efficiency at work in order to improve individual/collective satisfaction and performance. The app acts like an alert system whose purpose is to detect obstacles that are negatively affecting performance. Worksapiens explains work adaptability based on a cognitive ergonomics framework by combining people’s mental states - *mental fatigue, information processing, and communication capacities* - with the constraints imposed by the work environment.
- **Versions:** “at office” version (office context) and “home office” version (remote working context).
- **Time requirement:** 3 minutes of use per week
- **Available languages:** English, Spanish, French
- **Technical requirements:** internet and browser
- **Pricing:** free version (basic functions) and premium version (premium functions, unique payment of 5 usd)

Why Worksapiens?

Adaptability and cognitive ergonomics: the forgotten ones of work well-being

Why Worksapiens? Usually limited to a few business sectors and professions, remote working or “home office” has suddenly become one of the only alternatives at hand for many organizations to continue their activities during the disruptive environment induced by the 2020 Covid-19 pandemic crisis.

The imposition of more or less strict lockdowns in most countries has suddenly and chaotically imposed home office as a work paradigm among millions of persons. In most cases this change was carried out with much improvisation and lack of standards necessary for settling the minimal conditions to establish an adequate work performance but also to adapt people to this new paradigm. In a few months, home office monopolized the debate around the problem of people's adaptability to their work.

However, a brief retrospective look is enlightening to establish some of the challenges - now in the background - of adaptation and work well-being prior to the home office boom. Over the past decades, recurring demands from managers and human resources professionals have mainly focused on the development and assessment of non-technical or “*soft*” skills, such as

communication, teamwork, adaptability, resilience, as well as in providing staff with adequate work resources for optimal performance (the “caricature” of the Californian GAFAs has often served as an ideology and model to follow). To a lesser extent, **cognitive ergonomics** - the disciplines that aim to improve people's adaptation to their jobs - has also been an issue on the agenda of larger organizations. These “past” concerns not only persist but are generating new challenges for those having a supervisory role as a result of work habits changes due to the pandemic. For sure, even before this “*new normal*” the lack of staff's commitment to their organizations was quite high according to the *engagement index* developed by Gallup.

Improving collaborative work, reducing staff mental fatigue, and providing work resources to achieve optimal performance remain important aspects for any manager and organization. It is in this disruptive context for organizations that Worksapiens comes on the scene to **help people and work teams to maintain standards of well-being, efficiency, and effectiveness**. Although ergonomics is not unknown in organizations, **ergology** is a less diffuse approach generally confined to the academic world. It can be presented as the epistemological and anthropological sides of ergonomics.

Main goal of the app

Worksapiens reports updated preprocessed data of a set of variables that allow all members of a group to share and compare the following information:

- Compare the individual level of productivity (effectiveness and efficiency) with that of the group.
- Compare the individual level of mental fatigue with that of the group.
- Compare the individual level of satisfaction at work with that of the group.
- Compare the individual coherence index of responses with that of the group (premium version).

This way the different indicators shown by the app must allow the team leader to carry out a diagnosis of the dynamics of his team and if necessary define specific actions at the level of the variables likely to affect the performance, mental stress, and satisfaction of the team members. In turn, these indicators allow any user to compare his own indicators with the team's standards in order to allow him to adapt his strategies at work.

Worksapiens: a collaborative, empirical, pragmatic and ethical Pocket app

For people and organizations that are not familiar with the ergonomic-cognitive approach, what are the generic shortcomings and difficulties that arise in day-to-day work and that need to be checked?

Worksapiens is a collaborative “*pocket app*” (quick to use and manage) whose purpose is the analysis and improvement of work adaptation based on four pillars (**collaborative**, **empirical**, **pragmatic**, and **ethical**) which allows employees, regardless their function and hierarchical level, to establish a diagnosis and follow-up of variables involved in individual and collective work performance and adaptation. The use of the app is straightforward and intuitive and takes only 3 minutes per week. Worksapiens is available in English, French, and Spanish.

- **Worksapiens** is a collaborative tool based on real-time data sent by each user to their group. It is also a collaborative tool in that all users share common data making it possible to act collectively.

- **Worksapiens** is an empirical tool given that data result from the assessments that are regularly carried out by the participants and which are constantly updated. Finally, empirical since the analysis of the data is bound to the characteristics of each group (characteristics that can be customized by the group admin, see premium version), so that no generalization of the dynamics from one group to another should be undertaken.

- **Worksapiens** is a pragmatic tool insofar as its purpose is merely practical: to allow users to identify the critical points which hinder or facilitate the individual and collective execution of office and home office work. The pragmatic approach is also reflected in the fact that the app is not based on any specific theory. Worksapiens's conceptual proposal is *sui generis* and independent of a pre-existing theoretical framework (see below for the conceptual model).

Also pragmatic because the relevance of the variables monitored by the app is supported by numerous studies and by the daily practice of experts in the field. The variables are clearly labeled for unambiguous interpretation by users. For example Worksapiens avoids measuring the “stress” that work activities could cause, although this indicator is undoubtedly a decisive factor in work performance. Why is that? Even though “stress” is well studied from a physiological point of view, it is much less obvious to assess it correctly at the behavioral level (for example, different physiological indicators may be at a warning level although a person may not be feeling or perceived particularly stressed). That being said, for the sake of intellectual honesty, Worksapiens does not in any way claim to present itself as a tool that would scientifically explain behaviors which are naturally complex to measure. This is why a pragmatic approach has been chosen consisting in evaluating behaviors and/or descriptors that may not be those usually described in the scientific literature but which remain very understandable and therefore intuitively straightforward to assess. This is for example the case with “exhaustion” or “mental fatigue”. It is certainly a concept much broader than that of “stress”, not having a neurophysiological substrate as specific as the latter, but has the advantage of not presenting any ambiguity in its observable manifestations: fatigue, irritability, difficulty concentrating, cognitive saturation or overload, etc.

- **Worksapiens** is an app that defines itself as ethical in that its operating mode is based on two inherent criteria: (1) respect of user's confidentiality and (2) anonymous information sharing. The confidentiality of all participants is always guaranteed and prevents the group admin from associating any individual performance with a specific identity. In return, group indicators are shared in real time with all team members (this being an important fairness criteria) and thus respecting the ethical requirements of transparency and anonymity in the information sharing process. In this, Worksapiens considers that "*informational justice*" and "*procedural justice*", both concepts borrowed from **organizational justice theory**, are crucial when it comes to fostering effective collective work. Finally and no less important, these two criteria neutralizes to a large extent some of the commonly observed and well documented cognitive biases that occur during individual and group assessments (for example the *halo effect* and *social desirability* among others); biases that alter results and their genuine interpretation.

What Worksapiens does

What Worksapiens does is essentially track the evolution of two broad categories of variables which taken together account for the overall work performance of a person or a team. The first set includes the variables characterized as "exogenous" (that is, not directly related to people's characteristics) which directly have an effect on the level of work productivity (efficiency and effectiveness). The second set are the so-called "endogenous" variables (which are closely related to people's characteristics and living environment) that account for the control people have over their level of "mental fatigue" or "exhaustion".

While the exogenous variables correspond to a group of variables associated with tools and work protocols set up by the organization for the execution of the activities (for example, providing adequate technological and administrative support, a methodology for organizing work, etc.), the endogenous variables are related to the characteristics of people (for example, their adaptability and satisfaction levels with work) and their interactions with their working environment (the characteristics of their working place and coworkers, time and tasks management, etc.).

It's easy to conceive that the core difference between exogenous and endogenous variables is that the first are more easily objectified and therefore more easy to quantify, while the others are more related to the internal (mental) states of people; making the nature of these measurements more subjective. These two classes of measures "hard" and "soft" are profitable to combine as they complement each other when trying to understand the underlying dynamics of a human activity as complex as that of a group of persons interacting at work.

How Worksapiens works

The app's process

1. First, the person who will assume the role of group admin will create a group and generate invitations so that participants can join (all participants must first be registered in the app).
 2. Once the group has been created and participants have joined, all members will be notified to periodically carry out the brief self-evaluations (at minimum once a week) which will allow Worksapiens to estimate the levels of the performance variables.
 3. Based on these constant assessments Worksapiens continuously updates the data to generate individual and group reports; all group members share the same group information at the same time.
 4. The main individual and group indicators reported by Worksapiens are accessible at any time from the results tab and are represented by characteristic icons that follow the colors of a traffic light, always respecting the criteria of anonymity of identities.
- ⇒ **The time spent using the app does not exceed 3 minutes per week.**
- ⇒ **Worksapiens can also be used individually as a self-development device when a user creates a group in which he is the only member.**

The app tabs



1. Access screen to login or create an account.
2. Main tab of the app that lists user's groups and the pending and completed week assessments.
3. Traffic light tab displays the individual and consensus results which uses the colors of a traffic light as a straightforward interpretation code.
4. Tab that displays individual and group results represented on a "time axis", allowing to identify trends and patterns over time.
5. Tab that allows the user to create groups, modify his personal parameters, and upgrade to the premium version
6. Tab that provides information about the app, tips for understanding results, and contact email.

“At the office” and “Home office” versions of Worksapiens

Worksapiens examines work activity in two environments: 1) the work that takes place at the office; 2) home office work. Each environment is evaluated separately by the app. The group admin defines which work environment will be used when registering the group.

The importance of respecting users’ confidentiality

As we mentioned above, one of the criteria on which Worksapiens relies is that of “ethics”. There are two main reasons for this: (1) in the traditional “in office” working model most countries have fairly strict regulations over the control and collection of employee’s data gathered by employers. By extension, Worksapiens applies this rationale to the “at office” and “home office” versions. Worksapiens collects information from self-assessments for the sole purpose of analyzing group dynamics and thus never hands over identifiable individual data to the group admin. Individual data remains in the exclusive domain of their users so that they can establish personal benchmarks versus their group standards on each of the criteria being assessed. (2) Ensuring the anonymity of users helps to reduce the cognitive biases inherent to self assessments and their main consequence, specifically altering the real measures of the evaluations. Therefore, knowing that their identity will remain anonymous, users will perform self-assessments with greater sincerity and hopefully with less apprehension.

That being said, what information does Worksapiens allow users to see and not see?

1. All users have access to their individual performance indicators resulting from their self-assessments.
2. All users have access to the group’s performance indicators resulting from the averages of active members.
3. All members of the same group can view the scattering of productivity, mental exhaustion, and satisfaction of the group members through color labels according to the level of performance that has been reached. This information gives all users an idea of the dispersion of the overall performance and satisfaction of the group members. As said previously, it’s worth noting that the anonymity principle is strictly respected here since it is impossible to associate a colored icon with the identity of a user.

Understanding the app’s validity

A final comment concerning the validity of Worksapiens. Traditional and “serious” psychometric testing methods defined as such by the *American Psychological Association* fulfill, in principle, various validity criteria, the most significant of which is undoubtedly that of “predictive validity”. This criterion reports the strength of association between what a test result predicts, with an expected behavioral criterion (for example, a work performance, a favorable clinical course, etc.) that the test is supposed to measure. If the predictive validity of the test is low (which is unfortunately common), then its use would become unnecessary.

Following this reminder, *stricto sensu*, Worksapiens cannot be considered as a psychometric tool (and does not seek either to be one because of many theoretical-practical aspects that do not need to be discussed here) although it does assess mental states such as "mental fatigue" or "satisfaction". Rather, Worksapiens presents itself as a collaborative tool which in an empirical and pragmatic way allows individuals and groups to understand the reasons of a success or a systematic or temporary difficulty in carrying out office work activities.

⇒ Therefore it is very important to highlight that Worksapiens does not predict any behavior but rather reveals work dynamics in order to act on them.

Worksapien's "at the office" theoretical model

The structure of the "theoretical" model on which Worksapiens operates is based on the four pillars "collaborative", "empirical", "pragmatic" and "ethical" mentioned previously. As depicted in the diagram shown below, the different variables of the model clearly reflect its cognitive-ergonomics approach by covering the most frequent difficulties reported by organizations and people working in an office.

The model

The Venn diagram presented below shows the logical relationships between the different variables monitored by the app and which are periodically assessed by users. The model is intentionally simple which allows an intuitive understanding of the different relationships avoiding an unnecessary sophistication. Clearly, it is possible to identify the two categories of variables mentioned above (exogenous and endogenous) and the way in which they interact with each other by their overlap. It is, therefore, the complex interactions of these five variables that will give an approximation of the levels of **productivity, mental exhaustion, and satisfaction** of users and the group.



Variables with which Worksapiens estimates at the office productivity - mental fatigue - satisfaction

Self-assessment variables

5 + 1 questions conform to the self-assessment questionnaire which users respond on a regular basis (once or twice a week) that enables Worksapiens to estimate the performance and satisfaction indicators (the number of questions is deliberately low for a quick and efficient use of the app whose use doesn't take more than 3 minutes per week). Very important to mention, the definitions of these variables are always available to users to limit any ambiguity as to their interpretation.

1. **COMMUNICATION AND COLLABORATIVE WORK.** *At the present time how would you rate the effectiveness of communication and collaboration with your colleagues and other work relationships (for example, the ease of exchanging ideas, the contribution and commitment of each one to meet deadlines) and, in general terms, the follow-up done to your work?*
2. **WORK RESOURCES.** *At the present time, do you consider having the technological tools (devices, softwares), and resources (access to informational resources, and others) and the adequate administrative support of your organization to work effectively?*
3. **OFFICE/WORK ENVIRONMENT.** *At the present time, do you have a place where you can work comfortably (furniture, access to a rest zone) without suffering too much from interruptions or annoyances (for example, noise, bad smells, etc.) from other colleagues?*
4. **TIME AND ACTIVITIES MANAGEMENT.** *At the present time, are you able to optimize your working hours to fulfill the different tasks and attend contingencies (non scheduled meetings, problem solving) without feeling overwhelmed?*
5. **COMMUTING TIME.** *In general, your commuting time, either by public transport or using your own vehicle (car, motorcycle, bicycle, rollers, walking) is bearable and does not affect you, or is it an unpleasant experience?*
6. **JOB SATISFACTION.** *Considering the above questions, how satisfied are you currently with the way you are doing your job at the office?*

Performance indicators

These indicators are the heart of the system

1. PRODUCTIVITY (exogenous factors): assesses the level of efficiency and effectiveness of the work based on the tangible and intangible resources that the organization provides to the

staff, administrative support, communication effectiveness and the follow up of work tasks, and to a lesser extent the impact of the office environment on productivity.

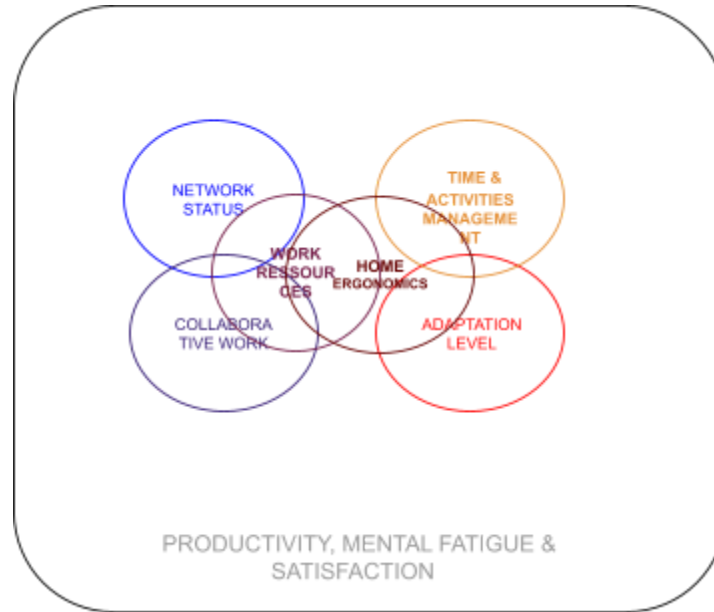
2. CONTROL OVER MENTAL FATIGUE (endogenous factors): assesses the level of mastery of the person over his mental exhaustion caused by the constant interferences experienced during work at the office, as well as his ability to organize time and tasks, and to a lesser extent the influence of the effectiveness of collaborative work over these latter factors.

3. AT THE OFFICE SATISFACTION: This indicator is independent of the other and assesses the level of satisfaction with the ongoing work activity (both work itself and the environment). The interest of this indicator is that it allows to detect possible patterns of inconsistencies between a good general performance but with a low level of satisfaction, or, on the opposite, a low general performance but accompanied by a high level of job satisfaction.

Worksapien's "home office" theoretical model

Here too the "theoretical" model of Worksapien "home office" is based on the four pillars "collaborative", "empirical", "pragmatic" and "ethical" mentioned above. In fact, the different elements of the "home office" model clearly reflect an orientation related to cognitive ergonomics problems by covering the difficulties most frequently reported by organizations and people who work remotely. In this sense, the following model monitors the critical variables that every user who experiences home office will face at some point.

The model



Variables with which Worksapiens estimates home office productivity - mental fatigue - satisfaction

Self-assessment variables

6 + 1 questions conform to the self-assessment questionnaire (they differ from that of the “at office” questionnaire).

1. **NETWORK STATUS.** *At the present time, your electrical installation, your Internet access and that of your interlocutors (workmates and others) allow you to carry out your activities correctly? For example, do you or your interlocutors regularly encounter difficulties attributable to the network that interfere or limit the progress of activities (a video conference, access to a computer network, sending files, etc.)?*
2. **COMMUNICATION.** *At the present time how would you rate the effectiveness of communication and collaboration with your colleagues and other working partners (for example, the ease of organizing and participating in video conferences, chatting and exchanging with your coworkers) and, in general, the follow-up that is done of your work?*
3. **WORK RESOURCES.** *At the moment, do you consider that you have acceptable technological (hardware/software), financial (several expenses covered related to teleworking), as well as administrative support from your employer to be able to work efficiently from your home?*
4. **HOME ERGONOMICS.** *At the present time, do you have a quiet and comfortable place to work peacefully without suffering too many interruptions or noise nuisance from other occupants of your house or the neighborhood?*

5. **TIME AND ACTIVITIES MANAGEMENT.** *When working from home, do you generally manage to optimize and balance the time dedicated to work with your other domestic and personal tasks while respecting the schedules and other obligations imposed by your employer?*
6. **ADAPTATION LEVEL.** *At the present time, what is your level of adaptation to the home office model required by your employer?*
7. **LEVEL OF SATISFACTION.** *How satisfied are you currently with working from home?*

Performance indicators

They have the same labels as for the “at the office” model but must be interpreted in a home office context.

1. PRODUCTIVITY (exogenous factors)
2. CONTROL OVER MENTAL FATIGUE (endogenous factors).
3. HOME OFFICE SATISFACTION:

Reading the results

This section outlines how to read and interpret the results. The results are presented in two different formats and are accessed from two tabs:

(1) the tab that symbolizes a "traffic light" which reports the different indicators that we have just presented and that are updated as self-assessments enter the system;

(2) the tab symbolizing a “chart” that presents the evolution of the results on a time axis, thus allowing the individual and group trends to be viewed through the passing of weeks and months.

The parameter “ $N(i)$ ” shown in the first tab tells the number of active participants in the group and on which Worksapien performs the different calculations. For example, a value of $N = 17/24$ indicates that the last evaluation was carried out with 17 users and that another 7 did not participate. The situation where all members of the group will not participate in an evaluation is likely to occur frequently. For this reason it is important to take into account the value of “ N ” when interpreting group values and see to what extent it is representative of the group. Encouraging everyone's participation is essential for the results to truly be meaningful.

The traffic light model

In the tab "traffic light" the values of the different indicators are numerical and express quantitative estimates of interval [0; 100] (the higher the number, the greater the magnitude of the indicator) but also qualitative information according to the "traffic light" model that complements the interpretation of the numerical result. This model, akin to a traffic light, provides clear information based on its three colors:




- **"Green"**, a numerical value on a green background, tells that the indicator is not interfering with the performance of the person and/or the team.
- **"Amber"**, a numerical value on an amber background, tells that the indicator is about to cause - or is already generating - a problem that interferes with the activity of the person and/or the team.
- **"Red"**, a numerical value on a red background tells the existence of a problem that must be addressed as a priority.


The cutoff values between each color category are set by Worksapiens to reflect the dynamics of high-performance teams, that is, relatively demanding. For example, achieving a "green" light implies achieving a minimum performance of 75/100. In the same way, a performance of only 50/100 for collaborative work implies an alert signal and corresponds to a "red" light.

Profile indicators guideline

Below are presented two tables that allow users to properly interpret each of the profile indicators. The questions in the table are what users should ask themselves when correctly interpreting the profile results.


At the office version


	What questions should I ask myself?		
			
	<u>individual perspective</u>	<u>Group perspective</u>	<u>Scattering indicators</u> green-amber-red
PRODUCTIVITY	. Am I working effectively	. Is collaborative work	. Is the work dynamic

<p>LEVEL (P)</p>	<p>with my colleagues?</p> <p>. Do I consider that my organization provides me with the necessary resources for a good performance?</p> <p>. Do I manage to optimize my time and work tasks well?</p>	<p>within the group effective?</p> <p>. Does the group has the necessary resources to carry out its tasks?</p> <p>. Does the group manage to respect the agreed deadlines and to deal with possible contingencies?</p>	<p>homogeneous within the group?</p> <p>Is there a consensus opinion over the availability of resources?</p>
<p>CONTROL OVER MENTAL FATIGUE (CMF)</p>	<p>. Do I feel comfortable with the office environment? And with colleagues?</p> <p>. Can I deal with the day-to-day tasks and contingencies?</p> <p>Does commuting to the office affect my work?</p>	<p>. Is the group noticeable with some of these signs: fatigue, boredom and / or stress? Either because of the office environment, difficulties in communicating or not meeting work goals?</p>	<p>. Does control over mental fatigue dynamics appears homogeneous within the group or scattered?</p>
<p>SATISFACTION AT THE OFFICE (S)</p>	<p>. Do I feel satisfied with the tasks I do, with the office environment and with my colleagues?</p>	<p>. What is the level of satisfaction of the group, and how can it be understood?</p>	<p>. How are satisfaction levels distributed within the group? Is there a lot of homogeneity or dispersion?</p>
<p>COHERENCE INDEX</p>	<p>. What is the relationship between my job satisfaction and my level of productivity and control over mental fatigue?</p> <p>. Is it coherent? Does it differ greatly from the group norm?</p>	<p>. What is the relationship between the group's satisfaction level, its level of productivity, and control over mental fatigue?</p> <p>. If it is not coherent, can it be inferred if it is due to stress, tiredness, relaxation, lethargy or poor performance at work?</p>	

Modalidad “home office”

	<p>What questions should I ask myself?</p>
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	<u>individual perspective</u>	<u>Group perspective</u>	<u>Scattering indicators</u> green-amber-red
PRODUCTIVITY LEVEL (P)	<p>. Am I working effectively from home with my colleagues? Is internet connection decent?</p> <p>. Do I consider that my organization provides me with the necessary resources for a good performance from home?</p> <p>Do I optimize my work time from home?</p>	<p>.Is collaborative remote working effective?</p> <p>. Does the group has the necessary resources to accomplish its tasks remotely?</p> <p>. Does the group manage to respect the agreed deadlines and to deal with possible contingencies?</p>	<p>. Is the work dynamic homogeneous within the group?</p> <p>Is there a consensus opinion over the availability of resources?</p>
CONTROL OVER MENTAL FATIGUE (CMF)	<p>. Do I have a comfortable place to work from home?</p> <p>. Do I adapt well to day-to-day tasks and manage contingencies?</p> <p>¿Me adapto bien al modelo propuesto de home office?</p>	<p>. Is the group noticeable with some of these signs: fatigue, boredom and / or stress? Either because of remote working or not meeting work goals?</p>	<p>. Does control over mental fatigue dynamics appears homogeneous within the group or scattered?</p>
SATISFACTION AT THE OFFICE (S)	<p>. Do I feel satisfied working from home?</p>	<p>. What is the level of satisfaction of the group, under a home office condition?</p>	<p>. How are satisfaction levels distributed within the group? Is there a lot of homogeneity or dispersion?</p>
COHERENCE INDEX	<p>. What is the relationship between my satisfaction with remote working and my level of productivity and</p>	<p>. What is the relationship between the group's satisfaction level, its level of</p>	

	<p>control of mental fatigue?</p> <p>. Is it consistent? Does it differ greatly from the group norm?</p>	<p>productivity, and control over mental fatigue?</p> <p>. If it is not coherent, can it be inferred if it is due to stress, tiredness, relaxation, lethargy or poor performance at work?</p>	
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Summary text

Below the traffic lights results appears a two sentences text that provides a brief general synthesis of the observed individual and group dynamics. The summary text is automatically updated according to the changes that arise after each new assessment.

For example:

"Well done! At the moment your performance at work seems satisfactory. As for the group, according to its members, an effort should be made to improve [category that is not in green]. There is a coherent relationship between group satisfaction and performance. "

Charts Reports

While the values of the traffic light model represent a picture of the current state of the group's dynamics, the chart reports show the evolution of these dynamics over the weeks and months. These charts provide to the group admin important information on the evolution over time of the performance and satisfaction of the group. For users, time information allows them to track and compare their individual progress with that of the group in a given time interval.

The premium version of Worksapiens

Worksapiens is available in two versions. The first is free of use while the premium one has a small cost as it includes additional functions that are not available in the free version (check details in the comparison table below).

The premium version is more adapted to the needs of firms where work is organized around functional and cross-functional teams thus generating an increased need for a more in depth follow-up of a great number of teams working "at the office" and remotely. Additionally, the premium version offers two valuable functions (detailed below) that add powerful analysis tools on individual and group activity: **the possibility of weighting each dimension being evaluated and the "coherence index"**.

Comparison table

Features	Free version	Paid version
User's guide	✓	✓
Multi language versions	✓	✓
Be a user and / or manage a group:	✓	✓
Real time indicators	✓	✓
Reports	✓	✓
Simultaneous participation to several groups		✓ (up to 4)
Groups with more than 9 participants		✓ (up to 100)
Multi admins per group		✓ (up to 3)
Weight customization of the variables by admin		✓
Additional metrics: "coherence index"		✓

Details of premium features

Number of users per group

Each group can include up to 100 participants (admin included) and allows up to 3 admins per group (the first admin grants rights once the group has been created).

Group admin and participation

A user can create and manage up to 4 groups simultaneously. A user who is not the admin of any group can participate in an unlimited number of groups simultaneously.

Customization of the dimensions weights

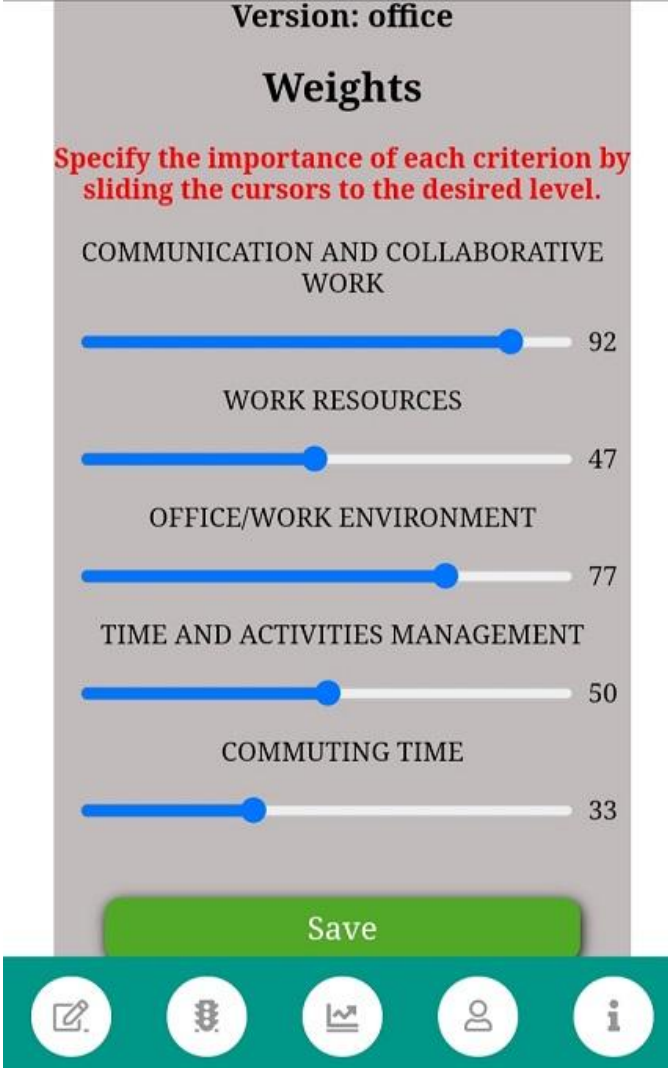
This is possibly the most interesting feature Worksapiens offers to customize the way the app works. With this feature the group admin can at any time change the relative weight of each of the self-assessment dimensions, thus making it possible to establish a hierarchy between the dimensions that are evaluated by the app.

This feature is essential since it gives the group admin the necessary flexibility allowing him to impose his own vision of what he considers to be the most significant configuration to obtain the best performance of his team. No doubt, for some team leaders, success will depend more on exogenous factors than on people's mental states. While for others, success will depend above all on people's ability to adapt to any work environment. Therefore, the possibility of assigning weights to the different dimensions gives the admin a range of possibilities in such a way that he

can apply his own vision on how individual and collaborative work should be evaluated to be more successful.

⇒ In the end, this feature makes it possible to go beyond a stereotypical and reductionist vision of the success factors involved in the achievement of efficiency since it precisely avoids explaining success in a single manner.

When creating a group the admin will be able to assign a weight for each dimension of the self-assessment questionnaire. The cursor position corresponds to a numeric value in the range [0; 100]. For example, suppose a user rates 75/100 on dimensions A and B. But if the admin has assigned different weights to A (for e.g., 92/100) and B (e.g., 47/100) then the user's 75 will not have the same weight when Worksapiens will perform the overall scores.



Version: office

Weights

Specify the importance of each criterion by sliding the cursors to the desired level.

Criterion	Weight
COMMUNICATION AND COLLABORATIVE WORK	92
WORK RESOURCES	47
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Coherence index

The premium version offers an additional metric that gives admin and users a more sophisticated analysis about individual and group dynamics.

The coherence index: In a variety of fields including, for example, psychology, economics, or biology, achieving and maintaining a balanced relationship between different variables is often the guarantee of the system's sustainability (by analogy with the concept of physiological homeostasis).

As previously stated, Worksapiens assesses “*productivity*”, “*control over mental fatigue*” and “*satisfaction*” at work. So what should the relation between these two variables look like for adequate long-term performance and well being? What could a high productivity and control over mental fatigue with a lower level of satisfaction mean? And the opposite relationship?

Worksapiens posits that to consolidate a performance that is sustainable over time, work performance and satisfaction levels must covariate (that is, when a variable increases or decreases in value, also does the other) but that the relative difference between the values of these two variables should never exceed 10-15 points on a 100 points scale. Otherwise, the group would then create the conditions for future problems that may be related to stress, lack of motivation, or work leisure, etc. It is precisely the role of the coherence index to alert the group admin and users of such an eventuality. **When an inconsistency situation arises, the numerical value is colored in orange or red in relation to the “productivity” and the “control over mental fatigue” scores**

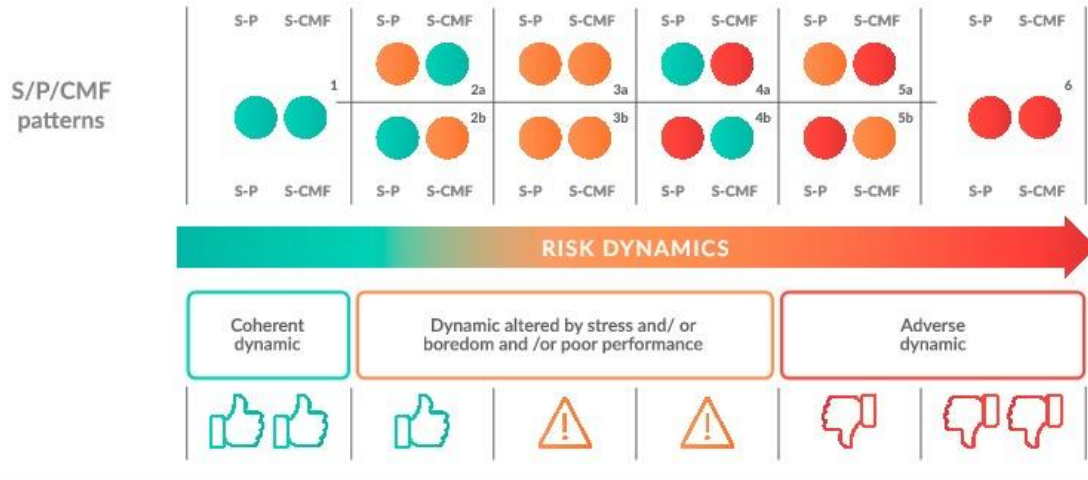
The following table summarizes the different configurations that can occur with the coherence index.

Coherence index	Green	Amber	Red
Coherence: Satisfaction Vs. Productivity <u>Green: 85-100</u> <u>Amber:67-84.99</u> <u>Red: 0 - 66.99</u>	Coherence	Moderate consistency	Lack of coherence
<p>Interpretatio S-P:</p> <p>If $S \approx P$ reflects a coherent relationship between the current level of satisfaction with the current level of productivity (be it high, medium, or low).</p> <p>If $S > P$ reflects a possible work performance issue. The person/group is probably feeling relaxed in detriment of the current activity. There is a risk of disconnection with the performance of the work.</p> <p>If $S < P$ reflects a possible dissatisfaction problem due to the person /group not feeling comfortable with the work routine. There is a risk of reduced productivity in the near future.</p>			

Note: a low level of coherence might also reflect a lack of sincerity of response from the user(s).			
Coherence: Satisfaction Vs. Control Mental Fatigue Green: 90-100 Amber:73-89.99 Red: 0 - 72.99	Coherence	Moderate consistency	Lack of coherence
<p>Interpretatio S-CMF:</p> <p>If $S \approx CMF$: reflects a consistent relationship between current satisfaction level and current mental fatigue control level (be it high, medium, or low).</p> <p>Si $S > CMF$: has several interpretations. Possibly the work is perceived as very interesting and/or the work environment very comfortable despite a heavy workload. It can also reflect an optimistic and motivated personality.</p> <p>Si $S < CMF$: possibly reflects an adaptability problem induced by the job and/or its environment. Work can be perceived as boring or, on the contrary, as very demanding, which exacerbates a high level of internal tension and/or between colleagues. It reflects a resilient profile with a high risk of future stress.</p> <p>Note: A low level of coherence might also reflect a lack of sincerity of response from the user(s).</p>			

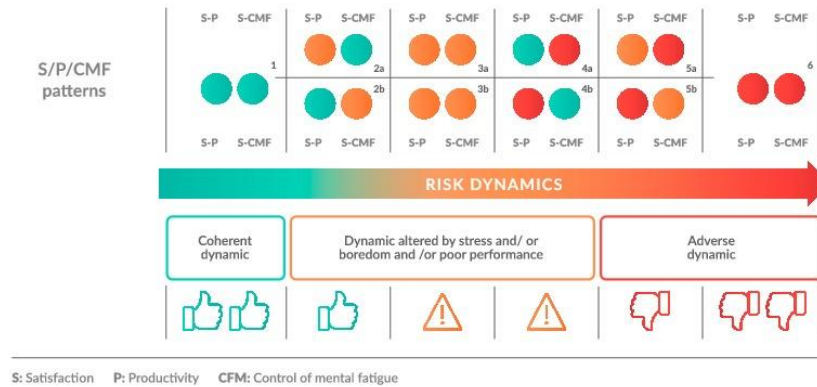
The coherence index is estimated at the user and group levels. The following diagram allows a quick and intuitive interpretation of the meaning of the different configurations that this index takes for users and groups. Each set of two circles represent the possible configurations - or combinations - that the coherence index can take in relation to productivity (S-P) and control over mental fatigue (S-CMF). It can be observed that the risk dynamics vary depending on the colors that these configurations take on the “risk dynamics” continuum. Thus, an “orange-green” configuration presents superior individual and/or group dynamics than an “orange-red” one, etc.

INTERPRETATION OF COLOR PATTERNS



S: Satisfaction P: Productivity CFM: Control of mental fatigue

INTERPRETATION OF COLOR PATTERNS



The first thing that stands out from the individual analysis of D. Molla's results is his optimal level in terms of the control he has over his mental fatigue (green color with a value of 78). This suggests that D. Molla does not feel overwhelmed by performing his tasks. He probably feels comfortable teleworking from home and is optimizing his work time without major interference. In a complementary way, D. Molla may have a resilient personality which allows him to cope with stressful moments correctly. This is certainly very positive. More striking is his below normal level of productivity (orange alert, value of 63) which is not being evaluated optimally. To know if D. Molla is facing difficulties with the performance of his tasks, or collaborative work issues with his teammates due to access to different work resources (tools, network status, etc.), it is important to compare this indicator with the group's equivalent one.

Indeed, it appears that the productivity level of the group is equivalent to that of D. Molla (orange alert, value of 61). This result suggests that there is a consensus of the group that the performance of the work is not being optimal. In addition to this, the group's control over mental fatigue is low (red alert, value 47). These group results should be a source of concern for the team leader. In other words, the group scores indicate that teamwork is not working well, which is causing some type of mental exhaustion in most of the collaborators. The reasons that explain this diagnosis are surely multiple: organization of collaborative work, workload management, the environment where the work is carried out, etc.

However, the level of job satisfaction reported by D. Molla and the group (green color, values 84 and 80) are surprising. D. Molla's high level of satisfaction is more understandable if we relate it to his high control over mental fatigue, itself surely related to the satisfaction of working from home. Less understandable is that of the group since the productivity and control of mental fatigue levels contradict having a high perception of satisfaction; even more so when checking

the variation indicators of satisfaction where 3 out of 4 teammates consider themselves as feeling very satisfied. For this reason it is necessary to be able to check the information provided by the coherence index in order to understand these counterintuitive results.

The consistency index helps to understand the consistency of user results by analyzing the relationship between job satisfaction and levels of productivity and control over mental fatigue. Regarding D. Molla, although the coherence regarding his productivity is not ideal (orange alert, value 79), it is not necessarily a source of concern since he is not far from the threshold to reach a “green” color. Obviously, the following weeks will set a trend on this. As expected, the level of coherence between satisfaction and mental fatigue is optimal (green, value 94). This confirms D. Molla's satisfaction with home office and his adaptation to this way of working. Regarding the group, the same can be said as that analyzed with D. Molla regarding the coherence of satisfaction with productivity; being important to follow its evolution over time in order to get a clear trend. However, the group's major problem is related to the (moderate) incoherence observed between high job satisfaction and low control of mental fatigue (red alert, value 67). In light of the results, this inconsistency could reasonably indicate that not all users have answered the questionnaire with complete honesty. Whatever the real reasons behind this pattern of results, the group dynamics is not satisfactory at all. If the team leader does not make any changes this could increase the level of risk in the performance of the work.

In summary, D. Molla's profile is relatively coherent and his work dynamics relatively positive.

However, there is a risk that the current dynamics of the group will end up negatively affecting ihm. It will then be a pending task to follow the trend of these indicators in the upcoming weeks.

FAQ and contact

1. How does the app work? Worksapiens is an individual and collaborative management “Pocket app” (quick to use) that helps users monitor their work activities in an office and home office contexts. Once admitted to a group by the admin, the user has access to the main panel allowing him to undergo the self-assessment questionnaire (users must respond at least once a week). This information participates in the elaboration of the different group indicators that the participant views. **If a user remains inactive for a week, he will not be able to view the group indicators until the assessment is undertaken.**

2. How is confidentiality preserved? To estimate the different group indicators (resulting from averages), each user shares his self-evaluations results since it is in the very nature of teamwork to share this type of information. However, this does not affect the confidentiality of the user's identity that it is always preserved as neither the admin nor any other participant has access to or can associate individual results with any identity.

3. How to create a group and add participants? From the app's tab "Users/Mygroups" click over the link "create a group". A new frame opens from which you can set all the parameters of the group. With the premium version you will be able to additionally enable other admins and create more than one group and set weights to each variable of the questionnaires.

4. How to join a group, and unsubscribe? You join a group through an invitation link shared by the group admin (you will need first to register as a user). When activating the link, the user is asked to join the group. You can unsubscribe from the group at any time by deleting it from your account. You can also delete your worksapiens account at any from the "User" tab.

5. What is the maximum number of participants per group? In the free version the maximum number of participants is 9 (admin included). The premium version allows up to 100 participants per group and up to 3 admins per group.

6. Can Worksapiens be used individually? Worksapiens can be used individually as a self-development tool when a user creates a group where he is the sole member.

7. What does the premium version offer? The paid version provides additional features that provide added value particularly for group managers and users. See the comparison table below:

Features	Free version	Paid version
User's guide	✓	✓
Multi language versions	✓	✓
Be a user and / or manage a group:	✓	✓
Real time indicators	✓	✓
Reports	✓	✓
Simultaneous participation to several groups		✓ (up to 4)
Groups with more than 9 participants		✓ (up to 100)
Multi admins per group		✓ (up to 3)

Weight customization of the variables by admin		✓
Additional metrics: "coherence index"		✓

8. How is the premium version accessed and how much does it cost? The secure payment module (Paypal, Mercadopago) is accessed through the "Upgrade" link in the "*User/My profile*" tab. The total cost per user is \$ 5 US dollars (no renewal fee). Send us an email after your payment is done to validate it.

9. Is Worksapiens based on a scientific theory? Worksapiens is not a psychometric test as classically defined by the American Psychological Association (APA). Rather, Worksapiens is a collaborative app that empirically allows individuals and groups to analyze the causes of a systematic or temporary success or difficulty in the execution of work activity. Worksapiens does not predict behaviors but reveals patterns of work dynamics based on a specific home office model. It reduces the cognitive biases of users.

10. How are results reported by Worksapiens to be interpreted? All the definitions of the different indicators are accessible by clicking on the "info" icon or through the "tips" page. Both variables and results are by themselves very intuitive to understand and are based on the color code of a traffic light, thus providing quantitative and qualitative information. For those who require a more in-depth and conceptual analysis, we recommend reading the user guide accessible from the "Information" page.

11. Need to contact us? For a technical issue, payment, or for any other question about the app: "worksapiens@gmail.com".