


FORCE 118-26936

## RESULTS

### Field Trial at Ving Resor using Back App Equipment Baseline, First & Second follow up surveys

|   |  |  |                |   |               |
|---|--|--|----------------|---|---------------|
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## Field Trial with employees at Ving Resor using Back App Equipment

The data presented here stems from a field trial executed in the company Ving Resor, Sweden. The field trial consists of 3 surveys, one prior to the use of Back App 2.0 and Back App 360, and two follow up surveys. The First follow up was performed after 6 weeks and the Second follow up after 6 months.

When reading this presentation, it is highly recommendable to have a copy of the questionnaires at hand. Due to the nature of the survey design, some questions did vary in their formulations across the Baseline, First and Second follow up.

All participant's responses to all questions will be presented here, and it is important to demonstrate caution on the interpretation of the results and possible trends spotted. The limitations in interpretations are presented at the relevant tables below.

### Background data

Initially the field trial included 51 employees, but for various reasons 17 of them have been excluded from the study, leaving 34 participants, whom have all completed the BASELINE, FIRST FOLLOW UP (after 6 weeks) and the SECOND FOLLOW UP (after 6 months).

As shown, most of the participants are female:

|        | No. of participants | Percent |
|--------|---------------------|---------|
| Female | 30                  | 88,2    |
| Male   | 4                   | 11,8    |
| Other  | 0                   | 0,0     |
| Total  | 34                  | 100,0   |

The average age is 41 years, the youngest being 21 years and the oldest 65 years.

85% of the participants indicate their height as being between 160 cm and 182 cm:

|                        | No. of participants | Percent |
|------------------------|---------------------|---------|
| Lower than 160 cm      | 2                   | 5,9     |
| Between 160 and 182 cm | 29                  | 85,3    |
| Taller than 182 cm     | 3                   | 8,8     |
| Total                  | 34                  | 100,0   |

All participants indicate their weight as being between 50 and 125 kg:

|                       | No. of participants | Percent |
|-----------------------|---------------------|---------|
| Less than 50 kg       | 0                   | 0,0     |
| Between 50 and 125 kg | 34                  | 100,0   |
| More than 125 kg      | 0                   | 0,0     |
| Total                 | 34                  | 100,0   |

## Which type of chair did people use prior to the field trial?

At the baseline measure, we asked people the following question:

**What type of chair have you been using before the upcoming Back App test period?**

**One choice only.**

- Standard office chair with back rest
- Standard office chair with back rest and arm rest
- Elevated office stool with foot ring
- Perching stool

**Other (please specify)**

The responses are shown in the following table:

|  | No. of participants | Percent |
|--|---------------------|---------|
| Standard office chair with back rest         | 12                  | 35,3    |
| Standard office chair with back and arm rest | 20                  | 58,8    |
| Elevated office stool with foot ring         | 2                   | 5,9     |
| Perching Stool                               | 0                   | 0,0     |
| Total  | 34                  | 100,0   |

## How do participants rate their old chair?

We also asked them to rate their old chair:

**How would you rate your current chair?**

Very comfortable, good      Quite comfortable      Comfortable, fair      Quite uncomfortable      Very uncomfortable, poor

Other (please specify)

The responses where:

|                          | No. of participants | Percent |
|--------------------------|---------------------|---------|
| Very comfortable, good   | 5                   | 14,7    |
| Quite comfortable        | 14                  | 41,2    |
| Comfortable, fair        | 11                  | 32,4    |
| Quite uncomfortable      | 2                   | 5,9     |
| Very uncomfortable, poor | 2                   | 5,9     |
| Total                    | 34                  | 100,0   |


Note that **4 people** rate their chair as either “**quite uncomfortable**” or “**Very uncomfortable**”. Using a chair with that experience for many hours every day should raise concern.

## How many hours do you **sit** during a normal work day?

This question varied slightly from **BASELINE** to **FIRST** and **SECOND FOLLOW UP**  
Please refer to the questionnaire printouts for inspection of the questions asked.

Think of a normal/average work day:  
How many hours per day are you **SITTING** at your computer work station?

0-2 hours                      2-4 hours                      4-6 hours                      More than 6 hours



|                   | No. of participants<br>BASELINE | Percent | No. of participants<br>FIRST Follow up | Percent | No. of participants<br>SECOND Follow up | Percent |
|-------------------|---------------------------------|---------|--|---------|---|---------|
| 0-2 hours         | 2                               | 5,9     | 6                                      | 17,6    | 11                                      | 32,4    |
| 2-4 hours         | 4                               | 11,8    | 11                                     | 32,4    | 7                                       | 20,6    |
| 4-6 hours         | 15                              | 44,1    | 9                                      | 26,5    | 10                                      | 29,4    |
| More than 6 hours | 13                              | 38,2    | 8                                      | 23,5    | 6                                       | 17,6    |
| Total             | 34                              | 100,0   | 34                                     | 100,0   | 34                                      | 100,0   |

The pattern seen at **BASELINE** changed in a **significant way** (e.g. looking at the second follow up), which means that participants at the second follow up indicate to spend **fewer hours sitting** at their workstation when using Back App 2.0 compared to using their old chair. *Wilcoxon signed rank test:  $Z=-2,91, p < 0,05 (p = 0,004)$* . However, a cautious interpretation is needed: The formulation of the question at **FIRST** and **SECOND** follow up leaves room for a different interpretation. Participants might have answered the question believing they were required to indicate how many hours they are sitting on the Back App 2.0 only. Maybe they still have their old chair nearby and sometimes use this as their preferred device at the work station. Hours spend on the old chair are not included, which might bring the total hours spend sitting to a higher level than revealed through this question.

## How many hours do you **stand** during a normal work day?

This question varied slightly from **BASELINE** to **FIRST** and **SECOND FOLLOW UP**  
Please refer to the questionnaire printouts for inspection of the questions asked.

Think of a normal/average work day:

How many hours per day are you **STANDING** at your computer workstation?



|                   | No. of participants<br>BASELINE | Percent | No. of participants<br>FIRST Follow up | Percent | No. of participants<br>SECOND Follow up | Percent |
|-------------------|---------------------------------|---------|--|---------|---|---------|
| 0-1 hour          | 15                              | 44,1    | 20                                     | 58,8    | 18                                      | 52,9    |
| 1-2 hours         | 10                              | 29,4    | 7                                      | 20,6    | 12                                      | 35,3    |
| 2-3 hours         | 5                               | 14,7    | 6                                      | 17,6    | 3                                       | 8,8     |
| 3-4 hours         | 2                               | 5,9     | 1                                      | 2,9     | 0                                       | 0,0     |
| More than 4 hours | 2                               | 5,9     | 0                                      | 0,0     | 1                                       | 2,9     |
| Total             | 34                              | 100,0   | 34                                     | 100,0   | 34                                      | 100     |

Again, the pattern seen at BASELINE changed in **a significant way**, which means that participants at the second follow up indicate to spend **fewer hours standing** at their workstation when using Back App 360. *Wilcoxon signed rank test:  $Z = -2,07$ ,  $p < 0,05$  ( $p = 0,038$ )*. The trend in responses might very well reflect that participants indicate the hours spend on the Back App 360, not including hours spend standing directly on the floor. Since the formulation of this question at FIRST and SECOND follow up leaves room for different interpretations, the total hours spend standing might be higher than revealed through the table above.

## How **often** have you experienced pain in the upper body?

This question varied slightly from **BASELINE** to **FIRST** and **SECOND FOLLOW UP**  
Please refer to the questionnaire printouts for inspection of the questions asked.

How often have you experienced pain in either the

- back
- shoulder(s)
- neck
- head
- arm(s) or
- hand(s)

at work during the past 6 months?

Never, almost never      Once a week      2-3 days a week      Almost every day



|                     | No. of participants<br>BASELINE | Percent | No. of participants<br>FIRST Follow up | Percent | No. of participants<br>SECOND Follow up | Percent |
|---------------------|---------------------------------|---------|--|---------|---|---------|
| Never, almost never | 9                               | 26,5    | 18                                     | 52,9    | 15                                      | 44,1    |
| Once a week         | 10                              | 29,4    | 9                                      | 26,5    | 12                                      | 35,3    |
| 2-3 days a week     | 7                               | 20,6    | 5                                      | 14,7    | 4                                       | 11,8    |
| Almost every day    | 8                               | 23,5    | 2                                      | 5,9     | 3                                       | 8,8     |
| Total               | 34                              | 100,0   | 34                                     | 100,0   | 34                                      | 100     |



Looking at the SECOND follow up column, 5 people have moved out of the category “Almost every day” and the number of participants in the “Never, almost never” has increased with 6. The people leaving the highest category are not the same as those entering the lowest, but still: They have all entered a lower category after using Back App equipment.

To check for the trend of participants experiencing pain in various areas less frequently when using Back App for 6 months (SECOND follow up), we have used the Wilcoxon Signed Ranks Test.

**Pain: Better, worse or the same?**

|                             |                | N               | Mean Rank | Sum of Ranks |
|-----------------------------|----------------|-----------------|-----------|--------------|
| How often pain (SECOND) vs- | Negative Ranks | 15 <sup>a</sup> | 11,17     | 167,50       |
|                             | Positive Ranks | 5 <sup>b</sup>  | 8,50      | 42,50        |
| How often pain (BASELINE)   | Ties           | 14 <sup>c</sup> |           |              |
|                             | Total          | 34              |           |              |

- a. How often pain (SECOND) < How often pain (BASELINE)
- b. How often pain (SECOND) > How often pain (BASELINE)
- c. How often pain (SECOND) = How often pain (BASELINE)

*The Wilcoxon signed ranks test:  $Z=-2,39$ ,  $p<0,05$  ( $p=0,017$ ; 2-tailed).*

As shown the “negative ranks” = 15, which means that 15 participants have indicated to experience pain **less frequently** after using Back App for 6 months compared to their frequency of pain experience prior to the use of Back App equipment. 14 participants experience no difference and 5 participants a higher frequency in pain experiences. The tables tell us nothing about the ‘amount’ or level of pain experienced. However, this is a statistically significant result (as opposed to a random pattern) and it could indicate, that a fair amount of people (44%, 15 out of 34) tend to experience pain **less frequently** in the upper body when using Back App for 6 months, compared to the use of ordinary office chairs.

At Baseline we ask people to think back 6 months and this might have an influence on the accuracy of the given responses since it is harder to remember the “history of pain” through 6 months without reminders along the way, rather than through 6 months, where attention for each participant is more focused on bodily pain, due to the participation in the field trial. Also, this field trial does not involve a control group, leaving room for uncertainty in the interpretation of where the less frequently experienced pain stems from (e.g. organizational changes, other work environment changes). Still: **The trend is the same whether we ask people after 6 weeks or 6 months.**


## The experienced level of lower back pain

This question varied slightly from **BASELINE** to **FIRST** and **SECOND FOLLOW UP**  
Please refer to the questionnaire printouts for inspection of the questions asked.

**Do you experience lower back pain during a normal work week?**

Very little lower back pain    Some lower back pain    Quite a bit of lower back pain    A lot of lower back pain

No lower back pain    pain    pain    back pain    pain



Note that this question (at **BASELINE**) aims to the level of experienced pain in the lower back in general, and not with reference to the “past 6 months”. The responses were:

|                                | No. of participants<br>BASELINE | Percent | No. of participants<br>FIRST Follow up | Percent | No. of participants<br>SECOND Follow up | Percent |
|--------------------------------|---------------------------------|---------|--|---------|---|---------|
| No lower back pain             | 11                              | 32,4    | 16                                     | 47,1    | 18                                      | 52,9    |
| Very little lower back pain    | 7                               | 20,6    | 7                                      | 20,6    | 8                                       | 23,5    |
| Some lower back pain           | 10                              | 29,4    | 7                                      | 20,6    | 7                                       | 20,6    |
| Quite a bit of lower back pain | 6                               | 17,6    | 2                                      | 5,9     | 0                                       | 0,0     |
| A lot of lower back pain       | 0                               | 0,0     | 2                                      | 5,9     | 1                                       | 2,9     |
| Total                          | 34                              | 100,0   | 34                                     | 100,0   | 34                                      | 100,0   |

To check for the trend of participants experiencing pain in the lower back less frequently when using Back App for 6 months (**SECOND** follow up), we have used the Wilcoxon Signed Ranks Test.

**Lower back pain: Better, worse or the same?**

|  |                | N               | Mean Rank | Sum of Ranks |
|--|----------------|-----------------|-----------|--------------|
| Lower back pain (SECOND) vs Lower back pain (BASELINE) | Negative Ranks | 16 <sup>a</sup> | 11,25     | 180,00       |
|  | Positive Ranks | 5 <sup>b</sup>  | 10,20     | 51,00        |
|  | Ties           | 13 <sup>c</sup> |           |              |
|  | Total          | 34              |           |              |

- a. Lower back pain (SECOND) < Lower back pain (BASELINE)
- b. Lower back pain (SECOND) > Lower back pain (BASELINE)
- c. Lower back pain (SECOND) = Lower back pain (BASELINE)

*The Wilcoxon signed ranks test:  $Z=-2,29$ ,  $p<0,05$  ( $p=0,022$ ; 2-tailed).*

As shown the “negative ranks” = 16, which means that 16 participants have indicated to experience **less pain in the lower back** after using Back App for 6 months compared to their level of experienced pain prior to the use of Back App equipment. 13 participants experience no difference and 5 participants a higher level of pain. This is a **statistically significant result** ( $p<0,05$ ) and it indicates, that a fair amount of people (47%, 16 out of 34) tend to experience **less pain** in the lower back when using Back App for 6 months, compared to the use of ordinary office chairs.

Interestingly, as shown with the **red marking** in the table above, 6 persons indicated that they experienced either “Quite a bit...” or “A lot of lower back pain”, prior to the use of Back App equipment. Only one participant in the SECOND follow up experienced this high level of lower back pain. The table above could indicate that people with a lot of lower back pain, find the Back App equipment very helpful (i.e. pain-relieving). The more the pain, the more the gain when using Back App 2.0?

As mentioned earlier, one must conclude on these trends with caution, since e.g. no control group was used in the field trial.

## A significant reduction in the number of painful areas on the body

### Baseline:

**Which of the following have you experienced during a normal work week that included pain? Multiple choices allowed.**

|  |   |         |
|--|---|---------|
| <input checked="" type="checkbox"/> Lower back pain/stiffness      | → | 1 point |
| <input type="checkbox"/> Shoulder and neck pain/stiffness          |   |         |
| <input checked="" type="checkbox"/> Headaches during or after work | → | 1 point |
| <input checked="" type="checkbox"/> Arm and/or hand pain           | → | 1 point |
| <input type="checkbox"/> None of the above                         |   |         |
| <input type="checkbox"/> Other (please specify)                    |   |         |

**Total: 3 point**

In this question participants can check several boxes to indicate the number of (and which) painful areas on the upper body. In the example above a participant has indicated three areas, which translates into a “pain score” of three. Thus, it is possible for a participant to achieve a pain score of 0 (zero) through 4. Reviewing the comments made in the “other”-category could of course qualify for an extra point, making it possible to obtain a pain score of 5 as a maximum.

The same question during FIRST and SECOND follow up looked like this:

This question regards the period you have been using Back App 2.0 and Back App 360.

Which of the following have you experienced during a normal work week that included pain? Multiple choices allowed.

- Lower back pain/stiffness
- Shoulder and neck pain/stiffness
- Headaches during or after work
- Arm and/or hand pain
- None of the above
- Other (please specify)

1 point

Total: 1 point

As was the case with the Baseline questionnaire, participants could make use of several check boxes in the First and Second follow up. The example above shows one participant's follow-up pain score of 1.

The points achieved were:

|                | No. of participants<br>BASELINE | Percent | No. of participants<br>FIRST Follow up | Percent | No. of participants<br>SECOND Follow up | Percent |
|----------------|---------------------------------|---------|--|---------|---|---------|
| Pain score = 0 | 3                               | 8,8     | 9                                      | 26,5    | 15                                      | 44,1    |
| Pain score = 1 | 12                              | 35,3    | 15                                     | 44,1    | 11                                      | 32,4    |
| Pain score = 2 | 12                              | 35,3    | 8                                      | 23,5    | 6                                       | 17,6    |
| Pain score = 3 | 6                               | 17,6    | 2                                      | 5,9     | 2                                       | 5,9     |
| Pain score = 4 | 1                               | 2,9     | 0                                      | 0,0     | 0                                       | 0,0     |
| Pain score = 5 | 0                               | 0,0     | 0                                      | 0,0     | 0                                       | 0,0     |
| Total          | 34                              | 100,0   | 34                                     | 100,0   | 34                                      | 100,0   |

At **BASELINE**, only 3 participants indicated to be without any pain (Pain score = 0) in the upper body during a normal week. At **SECOND** follow up, this has changed to 15 participants.

The trend clearly seems to be that participants indicate a lower number of painful areas both in the first and second follow up, which is also confirmed in the statistical calculations:

**Pain Score: Better, worse or the same?**

|                                      | N               | Mean Rank | Sum of Ranks |
|--------------------------------------|-----------------|-----------|--------------|
| PainScore (SECOND) vs Negative Ranks | 20 <sup>a</sup> | 11,55     | 231,00       |
| PainScore (BASELINE) Positive Ranks  | 2 <sup>b</sup>  | 11,00     | 22,00        |
| Ties                                 | 12 <sup>c</sup> |           |              |
| Total                                | 34              |           |              |

- a. PainScore (SECOND) < PainScore (BASELINE)
- b. PainScore (SECOND) > PainScore (BASELINE)
- c. PainScore (SECOND) = PainScore (BASELINE)

*Wilcoxon signed ranks test:  $Z = -3,47$ ,  $p < 0,05$  ( $p = 0,001$ ; 2-tailed).*

As shown the “negative ranks” = 20, which means that 20 participants experience pain in a **fewer** upper body areas after using Back App for 6 months compared to their experienced number of painful areas prior to the use of Back App equipment. 12 participants experience no difference and 2 participants a higher number of painful areas. The tables tell us nothing about the ‘amount’ or strength of pain experienced. However, this is a **statistically significant** result (as opposed to a random pattern) and strongly indicates, that a lot of people (approx. 60%, 20 out of 34) tend to experience pain in fewer areas of the upper body when using Back App for 6 months, compared to the use of ordinary office chairs. **The trend is the same whether we ask people after 6 weeks or 6 months.**

Since this field trial did not include a control group, caution must be taken when trying to conclude on the causes of the reduction in pain score. We cannot know for sure, whether other factors have contributed to the effect registered (confounding variables). The lower number of painful areas, could stem from many other variables, i.e. we do not know what else has happened in the company in question here (Ving Resor).

## The management of pain

This question varied slightly from BASELINE to FIRST and SECOND FOLLOW UP  
Please refer to the questionnaire printouts for inspection of the questions asked.

**If you experience pain during a normal work week:  
How often do you eat "pain killers" to reduce this pain?**

Never, almost never    1-2 days during the week    3-4 days during the week    5-6 days during the week    All week    Not relevant to me

Responses to this were:

|                          | No. of participants<br>BASELINE | Percent | No. of participants<br>FIRST Follow up | Percent | No. of participants<br>SECOND Follow up | Percent |
|--------------------------|---------------------------------|---------|--|---------|---|---------|
| Not relevant to me       | 4                               | 11,8    | 6                                      | 17,6    | 5                                       | 14,7    |
| Never, almost never      | 21                              | 61,8    | 24                                     | 70,6    | 24                                      | 70,6    |
| 1-2 days during the week | 8                               | 23,5    | 3                                      | 8,8     | 3                                       | 8,8     |
| 3-4 days during the week | 1                               | 2,9     | 0                                      | 0,0     | 1                                       | 2,9     |
| 5-6 days during the week | 0                               | 0,0     | 1                                      | 2,9     | 1                                       | 2,9     |
| All week                 | 0                               | 0,0     | 0                                      | 0,0     | 0                                       | 0,0     |
| Total                    | 34                              | 100,0   | 34                                     | 100,0   | 34                                      | 100     |

Note that the category "Not relevant to me" is included, so that participants not experiencing any pain or not wanting to answer the question, can give a meaningful answer to this question as well.

The pattern in responses across the field trial stays the same, making no additional analysis meaningful.



## How often do you feel tired?

This question varied slightly from BASELINE to FIRST and SECOND FOLLOW UP  
Please refer to the questionnaire printouts for inspection of the questions asked.

### How often do you feel tired at the end of a normal work day?

Frequently/every day      Quite often      Every now and then      Infrequently      Never



|                      | No. of participants<br>BASELINE | Percent | No. of participants<br>FIRST Follow up | Percent | No. of participants<br>SECOND Follow up | Percent |
|----------------------|---------------------------------|---------|--|---------|---|---------|
| Never                | 2                               | 5,9     | 4                                      | 11,8    | 4                                       | 11,8    |
| Infrequently         | 9                               | 26,5    | 13                                     | 38,2    | 15                                      | 44,1    |
| Every now and then   | 9                               | 26,5    | 9                                      | 26,5    | 9                                       | 26,5    |
| Quite often          | 11                              | 32,4    | 6                                      | 17,6    | 4                                       | 11,8    |
| Frequently/every day | 3                               | 8,8     | 2                                      | 5,9     | 2                                       | 5,9     |
| Total                | 34                              | 100,0   | 34                                     | 100,0   | 34                                      | 100,0   |

### Ranks

|   | N                                | Mean Rank                         | Sum of Ranks   |
|---|----------------------------------|-----------------------------------|----------------|
| How often tired (SECOND) vs<br>How often tired (BASELINE) | Negative Ranks<br>Positive Ranks | 17 <sup>a</sup><br>5 <sup>b</sup> | 11,65<br>11,00 |
|   | Ties                             | 12 <sup>c</sup>                   | 55,00          |
|   | Total                            | 34                                |                |

- a. How often tired (SECOND) < How often tired (BASELINE)
- b. How often tired (SECOND) > How often tired (BASELINE)
- c. How often tired (SECOND) = How often tired (BASELINE)

Wilcoxon Signed Ranks Test:  $Z = -2,39$ ;  $p < 0,05$  ( $p = 0,017$ )

Analyzing the data reveals a **statistically significant reduction** in the frequency with which participants feel tired after a normal work day. As always, one should caution the interpretation that the effect is caused by Back App equipment alone: At Ving Resor, workload changes in general over the months of the ongoing field trial, could have had an influence.

## Grading the ability to work


This question varied slightly from BASELINE to FIRST and SECOND FOLLOW UP  
Please refer to the questionnaire printouts for inspection of the questions asked.

This question regards the period you have been using Back App 2.0 and Back App 360.

During a normal week:

How would you grade your ability to work?

Low                      Somewhat low                      Moderate                      Somewhat high                      High



The response pattern from the surveys:

|               | No. of participants<br>BASELINE | Percent | No. of participants<br>FIRST Follow up | Percent | No. of participants<br>SECOND Follow up | Percent |
|---------------|---------------------------------|---------|--|---------|---|---------|
| Low           | 0                               | 0,0     | 2                                      | 5,9     | 2                                       | 5,9     |
| Somewhat low  | 0                               | 0,0     | 0                                      | 0,0     | 1                                       | 2,9     |
| Moderate      | 8                               | 23,5    | 5                                      | 14,7    | 9                                       | 26,5    |
| Somewhat high | 12                              | 35,3    | 16                                     | 47,1    | 9                                       | 26,5    |
| High          | 14                              | 41,2    | 11                                     | 32,4    | 13                                      | 38,2    |
| Total         | 34                              | 100,0   | 34                                     | 100,0   | 34                                      | 100,0   |

No statistically significant trends were found here. If we trust the face value of this (participants experience an **unaffected ability to work** during the field trial), it could provide a nuance to the trend in the former question (feeling less tired). Even though participants feel tired at a lower frequency, the level of tiredness might not be so high (there is a difference between feeling VERY tired and just a little tired).

## Would you like to replace your regular chair to a Back App 2.0?

Would you like to replace your regular office chair with Back App 2.0 and Back App 360?

Yes

No

For obvious reasons this question was not asked in the baseline survey, but at the FIRST and SECOND follow up. The response pattern looks like this:

|       | No. of participants<br>FIRST Follow up | Percent | No. of participants<br>SECOND Follow up | Percent |
|-------|--|---------|---|---------|
| Yes   | 20                                     | 58,8    | 22                                      | 64,7    |
| No    | 14                                     | 41,2    | 12                                      | 35,3    |
| Total | 34                                     | 100,0   | 34                                      | 100,0   |

Which, after 6 weeks is approximately sixty-fourty percent. The trend towards "Yes" increases somewhat after usage of Back App for 6 months.

Of course, the responses given should be seen in the light of "who is paying". The respondents here are not paying for a chair out of their own pocket. Maybe the response pattern would be different if they were to pay themselves.

## Yes or no - elaborations

Please help us understand why you selected the answer above:  
(why yes or why no)

On the following pages we have divided the statements into those stemming from yes or no indications, respectively. Note that all statements (typos and misspellings included) are the originals.

Please, also be aware that even though all statements are numbered, it is not possible to view equally numbered lines of statements as stemming from the same person.

The statements shown are merely included to give a flavor of the thoughts and reflections from the pro- and con-users of Back App equipment.

## Yes – FIRST FOLLOW UP - I would like to replace my regular chair to Back App 2.0

1. Märker en tydlig skillnad i kroppen och cirkulationen, ingen värk i axlar som tidigare
2. It is comfortable and you feel active while sitting or standing
3. I like it
4. I automatically sit in a correct way and support my back and neck in a good and comfortable way
5. -
6. The best chair ever
7. Better for back
8. Jag gillar att variera mellan vanlig stol och Back App.
9. Jag gillar att variera mig då vi sitter / står cirka 8 timmar per dag så är det skönt med lite variation och därför önskar jag att ha kvar båda.
10. Det känns bättre för kroppen samt ryggen.
11. more confortable less stiff
12. I like the chair, and helps me to keep my back straight.
13. Det är enklare att sitta ergonomisk rätt och jag tänker mycket mer på ex bättre hållning.
14. I used to have problems with neck and shoulder pain, but that's almost completely gone after I started using Back App.
15. to use it more, you have to remove the old otherwise its a habit to pick the old
16. Jag känner att min hållning blir betydligt bättre när jag använder stolen och balansplattan, vilket gör att mitt välmående blir i helhet bättre.
17. Jag har mycket mindre ont i axlar och nacke när jag använder Back App.
18. It's way comfier, more ergonomic and overall a better chair. I don't sink down, I'm active as I work. I do tend to feel more energized than I would in a normal chair, still a bit tired due to my own personal patterns.
19. As soon as i sit on the chair it feels as a nerve start to press in my neck and gives pain out to my arm and after 20 minutes a huge headache comes that lasts for almost 1 day. Therefor i dont use it. I never exeprience any problems from my normal chair.
20. Jag önskar två stolar

Note that participant statement #19 indicates some sort of misunderstanding: Maybe she thought the question regarded turning back to her old chair (which is why she answered "yes"). She seems to have no intention of using Back App 2.0.

## Yes – SECOND FOLLOW UP - I would like to replace my regular chair to Back App 2.0

1. Den gör att jag sitter mer rakt och får bättre hållning
2. Märker en förbättring i hur pigg jag känner mig
3. I find that i more often mix standing and sitting with the back app chair than the regular chair.
4. Jag sitter så sällan ner
5. nowadays I automatically sit/stand in a proper way that give me energy and comfort instead of wearing me out.
6. Känns som ett bättre för kroppen
7. The best chair ever
8. Jag tycker att back app är en skön stol och jag sitter bättre vid skrivbordet när jag arbetar
9. det känns fint
10. better for back
11. Jag har märkt stora skillnader i nacken och stelhet i ryggen. Jag har provat varva stolen med en vanlig enstaka tillfällen och det är verkligen en stor skillnad. Jag mår bättre sedan jag började använda Back app på en daglig basis
12. Since I use it more often than other chairs at the office
13. Du använder fler muskler för att sitta bra och får bättre hållning.
14. xxxx
15. I think yes feels like my back is better
16. I like the back up chair more than my old one.
17. I feel that I have a better workingposition, and that is doing good to my core muscles
18. we are 2 sharing a chair so we can have a mix with a regular chair, works out fine for us.
19. Jeg har så godt som ingen problem med nakke og skuldre lenger, noe jeg hadde store problem med tidligere.
20. Jag har betydligt mindre ont i nacken nu. Dock har jag blivit/fått "knotor"/blivit hård längre ner i ryggen. Samt fått problem med vänster arm/hand.
21. Jag har blivit bra i ryggen
22. higher energy level and straighter back

## No – FIRST FOLLOW UP - I would not replace my regular chair to Back App 2.0

1. jag känner mig mindre trött nack och rygg när jag sitter med back app
2. Jag sitter bekvämare och känner mig trots allt mer utvilad med Back App.
3. I want to have both, so I can switch.
4. i will like to continue with back app little more
5. I would like to have a mix with my normal chair
6. I feel much better in my neck and shoulders now after using my Back App chair!
7. Jag kan inte sitta hela dagen på 2,0 då jag upplever att det blir för varmt och det trycker på underlivet. Jag tycker att jag får för stor obalans när jag använder 360. fast att jag ställer den på lägsta
8. bra med variation
9. I'm not sure. I would like both, just now I don't want to change only to Back app.
10. I would love to keep the Back app chair, but since I feel the need to change to a "regular" chair after a couple of hours, due to pressure under the butt, I then need both chairs.
11. Vill kunna använda mig av både en vanlig kontorsstol samt av Back App
12. Behöver användas mera för att utvärdera bättre
13. gets tired using it
14. skönt med ryggstöd

## No – SECOND FOLLOW UP - I would not replace my regular chair to Back App 2.0

1. Jag önskar att variera med stolen, plattan och vanlig kontorsstol
2. Jag sitter skönare på en stol med rygg och nack stöd.
3. jag uppskattar ryggstöd
4. Jeg kan desværre ikke forlade min stol, fordi at den er alt for skøn, at ville ryggen imod. Derimod, vil jeg stadig varve med at bruge BackApp i kombination med almendelige stoler.
5. I have stoped, got problem with my neck/shoulder
6. I would like to share Back App with a colleague 50%
7. Due to sever pain in my head and neck and arm, with my normal chair i dont have any pain
8. Jag vill gärna kombinera den med att stå och ibland sitta på en vanlig stol
9. Jag använder mig av både en vanlig och BackApp stolen, varierar



10. har funderat bra med min vanliga stol och är för dåligt på att byta fram och åter. Vill inte ha enbart Back app stolen.
11. did not like it
12. tycker det är skönt med ryggstöd

## Please tell us about your experience with Back App 2.0/360

Please tell us about your experience with Back App 2.0 and Back App 360 so far:



Again, it makes sense to divide the responses between those in favor of switching chairs and those not keen on the idea.

## Yes – FIRST follow up (elaborations on the general experience with Back App)

1. Bra, se ovan.
2. Lite känningar i ländryggen första tiden men försvann när jag varvade med vanlig stol och sedan använde backapp i längre perioden, nu helt borta
3. It has been good, somewhat challenging cause of the difference. I feel like I stand a lot more, maybe because of the trouble getting up on the chair and sitting on it in different clothing materials.
4. It's good
5. The first few days or maybe week i had a little bit of musclepain but I after a while it was all gone. It must have been due to excersise and using the right muscles :)
6. Bara positivt.
7. -
8. Very good
9. Great
10. Great - first word that comes to my mind. The issue with stretching my jeans up against my gentleman parts have resolved slightly, or I've gotten used to it. No issues other than the slipping of the Back App 2.0, the 360 works wonderfully.
11. Jag är mycket nöjd med stolen och plattan.

12. Jag är nöjd med stolen och ståplattan just på grund utav variationen
13. Back App känns som ett bra alternativ för att träna upp kroppen men också för att minska andra sorters belastning.
14. very good more flexibel
15. I have had vacation and just got back. But i experience the chair very good and comfortable
16. Bra. Se ovan.Litet minus för att stolen tar stor plats.
17. As soon as i sit on the chair it feels as a nerve start to press in my neck and gives pain out to my arm and after 20 minutes a huge headache comes that lasts for almost 1 day. Therefor i dont use it. I never exeprience any problems from my normal chair.
18. Very good!
19. Känns som ett bra alternativ att variera med
20. love it, feel so much more energetic and less pain in back. I sit all day

## Yes – SECOND follow up (elaborations on the general experience with Back App)

1. se ovan
2. Är en vaneperiod i början då det behövs kortare stunder med stolen, lätt att man börjar slarva lite genom att sitta snett eller böja ryggen
3. I find that i more often mix standing and sitting with the back app chair than the regular chair.
4. Den är mjuk och helt okej.
5. only positive thoughts . Took me a little while to sort out how to sit in the correct way. I don't want to loose this chair and my collegaues envy me ;)
6. Utmana musklerna och kroppen mer
7. Very comfortable
8. En väldigt skön stol och jag sitter bättre. Mindre ryggvärk.
9. har varit kul o stärkanden
10. great

11. Jag har märkt stora skillnader i nacken och stelhet i ryggen. Jag har provat varva stolen med en vanlig enstaka tillfällen och det är verkligen en stor skillnad. Jag mår bättre sedan jag började använda Back app på en daglig basis
12. I use it often and its nice to been in the testgroup
13. jag är nöjd med både stolen samt plattan
14. Tycker det fungerar bra ibland lite trött axlarna
15. Im more flexible
16. I can feel that Im sitting more straight
17. See above
18. for me it is nice for the legs and the circulation wich i have problems with since many years ago. My vens are bad.
19. Veldig positiv! Har ikke opplevd noen problemer.
20. Fått mindre huvudvärk och inte lika ont i nacken. Men dte verkar som att spänningar och "knutor" flyttat längre ner i ryggen.
21. Kan inte sitta 8 timmar men 4-6 fungerar. Blir för varmt och klämmande
22. excellent chair and very comfortable

## No – FIRST follow up (elaborations on the general experience with Back App)

1. jag tycker de fungerar bra, jag sitter rakare och blir mindre trött i nacke och rygg än tidigare
2. stolen är bra, skönt att sitta högt, men har svag rygg så orkar inte ha bra hållning, skönt att variera med en vanlig stol som har ryggstöd
3. Det är väldigt behagligt för ryggen och axlarna. Att jag har ont i axeln beror på att jag använder en mousetrappor och inte har handledsstöd för handleden. Armen hänger i luften.
4. Good, I sit better with my back.
5. its good need more experience
6. I like the chair, but as I wrote above, I don't want to have only back app.
7. I like it very much but my body need a mix of 2 chairs.
8. As above....

9. I love it !
10. Upplever att jag får ont på baksidan av mina lår/ben
11. Se svaret ovan
12. Bra så långt, träna på att använda med nu efter min semester
13. not used to it.
14. skönt att växla med en vanlig stol känner att den fungerar som den skall

## No – FIRST follow up (elaborations on the general experience with Back App)

1. De fungerar bra och jag känner stor skillnad, speciellt när jag använder stolen.
2. Absolut en stol som är bra för en bättre hållning då man blir mer medveten om att sitta rakt.
3. spännande, men jag glider ner från sitsen, kan ej hålla hållningen
4. Jeg kan virkelig godt lide den. Giver god komfort og er skÅ,n at sidde på. God idÅ"!
5. I have stoped, got problem with my neck/shoulder
6. I like it, but not for use 100% on a day...
7. A few minutes after sitting on the chair i got a headache and pain out in my neck and
8. Positiv
9. Gillar att kunna variera och jag känner att min kroppshållning blir mycket bättre med Back App
10. Positivt, förstår att den kan förebygga mycket, tror andra som har mera besvär och kanske inte är så fysiskt aktiva utanför arbetet har mera nytta av den
11. did not like it
12. skönt använda i bland, men känner ändå att en normal stol är bättre för mig i längden. hade varit toppen om vi kunde ha båda och växla

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