

# Survey of Whitewater Kayaking Community Members

## Preface

This survey is about your innovative activities and efforts within the field of whitewater kayaking. We want to better understand how individual kayakers contribute to the development of the sport and to the development of the whole industry by their innovative ideas and contributions.

It is part of a research program initiated by the MIT Sloan school of management (Cambridge, USA) and Copenhagen Business School (Denmark) to study open innovation in sport communities.

On average, the survey will take 10 to 20 minutes.

All information received will remain ANONYMOUS and be treated strictly CONFIDENTIAL.

Do you have any questions or comments? Please contact me at: phone +45/38152589, e-mail [ch.ino@cbs.dk](mailto:ch.ino@cbs.dk) Please email your response to [ch.ino@cbs.dk](mailto:ch.ino@cbs.dk) or send it via mail

to: Eric Von Hippel  
MIT Sloan School of Management, E52-556  
Cambridge, MA 02141  
USA

Many thanks for your co-operation!

Best wishes,

Christoph Hienerth

## SECTION A: TYPE OF USER

### Intro1

The first questions are about the nature of your whitewater kayaking participation

### A1

Please indicate during which period you were participating in the sport of whitewater kayaking.

From \_\_\_\_\_(YEAR) to \_\_\_\_\_(YEAR)

### A1a

Within this timeframe, what was the period in which you were most active?

From \_\_\_\_\_(YEAR) to \_\_\_\_\_(YEAR)

**A2**

Within your most active period, how would you describe your skill level on a range from total expert to novice (compared to all the people active in your most active period)?

Total expert

Novice

1

2

3

4

5

6

7

**A3a**

Please indicate what style of boating/kayaking you do most:

(Please select your most relevant style)

1: Downriver kayaking (difficulty I-IV)

2: Extreme whitewater (difficulty above IV)

3: Creek boating (steep, small runs)

4: Riding waterfalls

5: Squirt boating

6: Rodeo kayaking/freestyle/playboating

7: None of these

**A3b**

What other styles of boating/kayaking do you do?

(Please select your second most relevant style)

1: Downriver kayaking (difficulty I-IV)

2: Extreme whitewater (difficulty above IV)

3: Creek boating (steep, small runs)

4: Riding waterfalls

5: Squirt boating

6: Rodeo kayaking/freestyle/playboating

7: None of these

#### A4

Have you ever participated in any of the following kinds of whitewater kayaking innovation or novel development?

	never	barely	sometimes	Often	very often
a. Designing and building any hardware/equipment for my own use (e.g. kayak hull, hull modification, kayak fittings, equipment, safety vest, paddles, rescue rope, etc.)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
b. Developing kayaking technique (kayaking moves, paddle strokes, etc.)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
c. Developing infrastructure innovation (e.g. providing novel river information, building playspots, developing new ways of competing, doing new forms of training, building a new website or electronic forum for paddlers, etc.)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
d. I have contributed to the sport in another way	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

Explanation:

*Innovations in “**equipment or hardware**” can be any ideas/inventions/innovations in, for instance, kayak hulls, kayak designs, kayak equipment or hardware developed for a kayak or equipment needed for kayaking. Please consider that **any novel** development or modification counts here (e.g. also developing your own kind of fittings, as long as you do not exactly copy them from somewhere, etc.).*

*A “**technique**” development can be anything related to ways / forms of kayaking (e.g. a new paddle stroke, a new way to paddle a certain part of the river, a new freestyle move, a new way to ride down a waterfall, a new way to initiate a move, etc.). Please consider that **any new way of doing your paddling** counts here as long as it is not an exact copy of somebody else’s moves or paddle strokes. This is also true for applying existing techniques to new environments (e.g. using paddle strokes from canoeing in kayaking or doing freestyle moves over a waterfall, etc.)*

*An “**infrastructure**” development or innovation can be anything related to improve or enable at all to perform whitewater kayaking. It can for instance be a new form of organizing paddle activities, a new form of description for rivers or playspots, or the development of a novel forum on the internet to enable better communication between*

*kayakers or the development of new forms of training or training material or also developing new forms/ways of transporting people or gear to the river. It comprises **anything** that contributes to performing the sport better or easier or in a new way. Again, please consider everything you did that is not an exact copy of somebody else's innovations.*

**A4a**

If you contributed to the sport in other ways, what did you do?

.....  
.....

**A5**

How many days per year did you spend on the following activities in an average year during your most active period (please estimate):

- a. Designing / building and testing novel kayaking equipment days
- b. Replicating existing hardware for your own use days  
*(e.g. kayak hull, hull modification, kayak fittings, equipment, safety vest, paddles, rescue rope, etc.)*
- c. Plain paddling days
- e. Participating in the development of infrastructure days  
*(e.g. providing novel river information, building playspots, developing new ways of competing, doing new forms of training, building a new website or electronic forum for paddlers, etc.)*
- f. Training/teaching other people days
- g. Collecting novel information about rivers / playspots, etc. days
- h. Another activity.... (for instance: helping out in organizing competitions) days

**A5x**

What other activities related to Kayaking did you spend time on?

.....  
.....

**A5y**

.How much of your time in paddling did you spend on (if any)

- a. Creating and testing novel techniques?  
(kayaking moves, paddle strokes, etc) .....days
- b. Learning/replicating existing techniques? .....days

**A6** If you did train other people:

Did/do you charge money for training/teaching other people?

Always		Sometimes	Never
--------	--	-----------	-------

1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>
----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	----------------------------

**A7**

How much money per year did you spend on the following activities in an average year during your most active period (please convert to either Euros or US dollars):

- a. Designing / building and testing novel kayaking equipment \_\_\_\_\_ [A6]
- b. Replicating existing hardware for your own use \_\_\_\_\_ [A6]  
*(e.g. kayak hull, hull modification, kayak fittings, equipment, safety vest, paddles, rescue rope, etc.)*
- c. Traveling for paddling \_\_\_\_\_ [A6]
- e. Participating in the development of infrastructure \_\_\_\_\_ [A6]  
*(e.g. providing novel river information, building playspots, developing new ways of competing, doing new forms of training, building a new website or electronic forum for paddlers, etc.)*
- f. Training/teaching other people (e.g. buying material, getting to the spot where the training is, etc.) \_\_\_\_\_ [A6]
- g. Collecting novel information about rivers / playspots, etc. (e.g. buying hardware, software equipment, maps, traveling to the spot, etc.) \_\_\_\_\_ [A6]
- h. Another activity (for instance: helping out in organizing competitions): \_\_\_\_\_ [A6]

**A7x**

What other activities related to Kayaking did you spend money on?

.....

.....

**A7y**

How much of this investment did you spend on (if any)

- a. Creating and testing novel techniques (e.g. money spent in traveling to a particular spot, river for a specific new technique)? .....[A6]
- b. Learning/replicating existing techniques? .....[A6]  
(kayaking moves, paddle strokes, etc)

**A8**

Are you member of a local community of whitewater kayakers that you meet in person from time to time (both formal and informal communities)?

- yes
- no

**PLEASE FILL IN THIS FOLLOWING SECTION ONLY IF YOU DID INNOVATIONS IN EQUIPMENT/HARDWARE! (OTHERWISE PLEASE PROCEED TO SECTION C)**

**SECTION B: INNOVATING EQUIPMENT/HARDWARE**

**Intro 2**

The following questions relate to equipment and hardware that you developed or improved for whitewater kayaking **in your most active period.**

**B1**

Please describe what types of equipment/hardware modification/creation you did.

.....  
.....

Explanation:

*Developments in equipment or hardware can be any ideas/inventions/innovations in, for instance, kayak hulls, kayak designs, kayak equipment or hardware developed for a kayak or equipment needed for kayaking.*

**B2**

What motivated you to develop or modify equipment/hardware? Please distribute 100 points according to what you find most important.

- a. I needed it myself .....%
- b. I enjoyed doing it .....%
- c. I wanted to learn or develop my skills .....%
- d. I wanted to help other kayakers .....%
- E Because it could potentially be a product for me to sell .....%

f. Other reasons

$\frac{\dots\%}{100\%}$

**B3**

For what other reasons (if any) did you develop or modify this hardware?

.....  
.....

**B4a**

Was your development/idea an **exact** copy of some existing product or solution

Yes No

1  2

**B4b** If yes...

Was this a copy of an existing product made by another kayaker, or by a manufacturer?

1  another kayaker

2  a manufacturer

3  both

4  don't know

**B5**

Did you collaborate with other kayakers to develop or modify equipment/hardware?

1  yes

2  no

**B6**

Can you estimate how many others were involved (**on average per project**)?

.....other users

**B7**

Did you share the details of the developed equipment/hardware with any others?

1  yes

2  no

**B8**

How did you share it (multiple answers possible)?

a  Freely revealing it by showing it to anyone who was interested

b  Selectively revealing it to some kayakers while hiding it from others

c  Publishing some description of it (on the net or in a magazine, etc.)

d  Making one or more copies for other kayakers

e  Revealing it to a manufacturer so that they would produce it

f  Otherwise, please specify.....

**B9a**

How many copies did you make for other kayakers?

.....

**B9b**

Did you make them for free, for barter (e.g. for beer or in exchange for other kayaking gear) or did you sell them? (multiple answers possible)

- For free  
a
- For barter  
b
- Sold them  
c

**B10a**

To the best of your knowledge, have any other kayakers adopted this hardware modification or innovation?

- 1  Yes
- 2  No
- 3  I don't know

**B10b** If yes...

Were these just kayakers in your local community, or also other kayakers?

- 1  just my local community
- 2  also other kayakers

**B11**

Has the equipment/hardware developed by you been manufactured? (multiple answers possible)

- a  Yes, I manufactured it myself for sale
- b  Yes, I shared my ideas for free with a manufacturer who then manufactured it
- c  Yes, a manufacturer employed or sponsored me to develop it
- d  Yes, a manufacturer adopted it without me participating in the process
- e  No
- f  I don't know

**B12** (If B11a = 1 or B11c=1)

In the case that your ideas/innovations got commercialized, what was your motivation to develop them? Was it more the financial incentive or that you wanted to use them yourself? (Please try to give each of the two options a percentage adding up to 100%)

Using it myself		Being paid/ selling it		Sum
_____ %	+	_____ %	=	100%

**PLEASE FILL IN THIS FOLLOWING SECTION ONLY IF YOU DID INNOVATIONS IN TECHNIQUES! (OTHERWISE PLEASE PROCEED TO SECTION D)**

**SECTION C: INNOVATING TECHNIQUES**

**Intro 3**

The following questions relate to any technique that you developed or improved for whitewater kayaking **in your most active period.**

**C1**

Please describe what types of techniques you developed.

.....  
 .....

Explanation:

*A “technique” can be anything related to ways / forms of kayaking (e.g. a new paddle stroke, a new way to paddle a certain part of the river, a new freestyle move, a new way to ride down a waterfall, a new way to initiate a move, etc.)*

**C2**

What motivated you to develop new techniques? Please distribute 100 points according to what you find most important.

- |  |            |
|--|------------|
| a. I needed it myself  | .....%     |
| b. I enjoyed doing it  | .....%     |
| c. I wanted to learn or develop my skills  | .....%     |
| d. I wanted to help other users  | .....%     |
| e. Because it could be potentially profitable for me (for selling training, education, etc.) | .....%     |
| f. Other reasons   | .....%     |
|  | <hr/> 100% |

**C3 If any...**

For what other reasons did you develop new techniques?

.....  
 .....

**C4a**

Was the technique developed by you an **exact copy** of some existing technique?

- |                            |                            |
|----------------------------|----------------------------|
| Yes                        | No                         |
| 1 <input type="checkbox"/> | 2 <input type="checkbox"/> |

**C4b If yes...**

Was this a copy of an existing technique performed by another kayaker, or was it provided by a manufacturer (e.g. training, teaching, book or video commercially sold)?

- 1  another kayaker
- 2  a manufacturer
- 3  both
- 4  don't know

**C5**

Did you collaborate with other kayakers to develop new techniques?

- 1  yes
- 2  no

**C6**

Can you estimate how many others were involved (on average for specific techniques)?  
.....other users

**C7**

Did you share the details of the new techniques with others?

- 1  yes
- 2  no

**C8** If yes...

How did you share it (multiple answers possible)?

- a  Freely revealing it by showing it to anyone who was interested
- b  Selectively revealing it to some kayakers while hiding it from others
- c  Publishing some description of it (on the net or in a magazine, etc.)
- d  Revealing it to a manufacturer so that they would produce it (as a book, video, etc.)
- e  Otherwise, please specify.....

**C9a**

To the best of your knowledge, have any others adopted your novel technique/s?

- 1  Yes
- 2  No
- 3  I don't know

**C9b** If yes...

Were these just kayakers in your local community, or also other kayakers?

- 1  just my local community
- 2  also other kayakers

**C10**

Have the techniques developed by you been commercialized? (multiple answers possible)

- a  Yes, I manufactured it myself for sale (in the form of books, videos, training, services, etc.)

- b  Yes, I shared my ideas for free with a manufacturer who then sold products or services based on it (books, videos, training, etc.)
- c  Yes, a manufacturer employed or sponsored me to develop it
- d  Yes, a manufacturer adopted it without me participating in the process (books, videos, training, etc.)
- e  No
- f  I don't know

**C11**

In the case that your ideas/innovations in techniques got commercialized, what was your motivation to develop them? Was it more the financial incentive or that you wanted to use the new technique yourself? (Please try to give each of the two options a percentage adding up to 100%)

Using it myself	Being paid/ selling it	Sum
_____ %	+ _____ %	= 100%

**PLEASE FILL IN THIS FOLLOWING SECTION ONLY IF YOU DID INNOVATIONS IN INFRASTRUCTURE! (OTHERWISE PLEASE PROCEED TO SECTION E)**

**SECTION D: INNOVATING INFRASTRUCTURE**

**Intro 4**

The following questions relate to developments or improvements to the infrastructure needed for kayaking **in your most active period**.

**D1**

Please describe what types of infrastructure innovation you developed.

.....  
 .....

Explanation:

*An “infrastructure” development or innovation can be anything related to improve or enable at all to perform whitewater kayaking. It can for instance be a new form of description for rivers or playspots, or the development of a novel forum on the internet to enable better communication between kayakers or the development of new forms of training or training material or also developing new forms/ways of transporting people*

*or gear to the river. It comprises everything that contributes to performing the sport better or easier or in a new way.*

**D2**

What motivated you to develop infrastructure innovations? Please distribute 100 points according to what you find most important.

- |  |        |
|--|--------|
| a. I needed it myself  | .....% |
| b. I enjoyed doing it  | .....% |
| c. I wanted to learn or develop my skills                          | .....% |
| d. I wanted to help other users                                    | .....% |
| e. Because it could be potentially profitable for me (for selling) | .....% |
| f. Other reasons   | .....% |
|  | <hr/>  |
|  | 100%   |

**D3** If other reasons...

For what other reasons did you develop infrastructure innovations?

.....  
.....

**D4a**

Was your development/idea an **exact copy** of some existing solution/product?

Yes    No  
1     2

**D4b** If yes...

Was this copy of an existing solution/product made by another kayaker, or by a manufacturer?

- 1  another kayaker  
2  a manufacturer  
3  both  
4  don't know

**D5**

Did you collaborate with other kayakers to develop new infrastructure?

- 1  yes  
2  no

**D6**

Can you estimate how many others were involved (in an average project)?

.....other users

**D7**

Did you share the details of the new infrastructure (product/solution) with others?

- 1  yes

2  no

**D8**

How did you share it (multiple answers possible)

- a  Freely revealing it by showing it to anyone who was interested
- b  Selectively revealing it to some kayakers while hiding it from others
- c  Publishing some description of it (on the net or in a magazine, etc.)
- d  Making one or more copies for other kayakers
- e  Revealing it to a manufacturer so that they would produce it
- f  Otherwise, please specify.....

**D9**

If you made copies for other kayakers, how many did you do?

.....

**D9a**

Did you make these for free, for barter (e.g. for beer or in exchange for other kayaking gear) or did you sell them? (multiple answers possible)

For free

a

For barter

b

Sold them

c

**D10a**

To the best of your knowledge, have any others adopted the new infrastructure?

1  Yes

2  No

3  I don't know

**D10b** If yes...

Were these all kayakers in your local community, or also other kayakers?

1  just my local community

2  also other kayakers

**D11**

Have infrastructure innovations developed by you been commercialized? (multiple answers possible)

a  Yes, I manufactured it myself for sale

b  Yes, I shared my ideas for free with a manufacturer who then manufactured it

c  Yes, a manufacturer employed or sponsored me to develop it

d  Yes, a manufacturer adopted it without me participating in the process

- e  No
- f  I don't know

**D12**

In the case that your ideas/innovations got commercialized, what was your motivation to develop them? Was it more the financial incentive or that you wanted to use them yourself? (Please try to give each of the two options a percentage adding up to 100%)

Using it myself	Being paid/selling it	Sum
_____%	+ _____%	= 100%

## SECTION E: Some final questions

### Intro5

Finally, we would like you to answer some general questions.

### E1

The next questions deal with activities performed **apart** from your most active period in kayaking

Did you do any innovations during your less active period in kayaking (multiple answers possible)?

- a: Yes, hardware/equipment innovation
- b: Yes, technique innovation
- c: Yes, infrastructure innovation
- d: No
- e: Don't know/will not say

### E2

Compared to your most active period, how much time did you spend on innovative activities in less active periods?

About \_\_\_\_\_% compared to my most active period

### E3

Compared to your most active period, how much money did you spend on innovative activities in less active periods?

About \_\_\_\_\_% compared to my most active period

### E4

In general, how skilled do you consider yourself in developing hardware / equipment?

Total Expert

to

Novice

1

2

3

4

5

6

7

### E5

Did you receive any (formal) training / education on developing hardware / equipment (e.g. working for a manufacturer for some time or from a specific technical education)?

1  yes

2  no

### E6

In general, how skilled do you consider yourself in developing new techniques?

Total Expert to Novice  
 1       2       3       4       5       6       7

**E7**

Did you receive any (formal) training / education on developing new techniques (e.g. training with a professional kayak team, gone through some official course or education, state training, or being sponsored by companies as a professional athlete, etc. )?

- 1  yes
- 2  no

**E8**

In general, how skilled do you consider yourself in developing infrastructure innovation?

Total Expert to Novice  
 1       2       3       4       5       6       7

**E9**

Did you receive any formal training / education on developing new infrastructure (e.g. formal education in how to develop sport training, education in writing/editing books, videos, developing web pages, formal rescue training, etc. )?

- 1  yes
- 2  no

**E9x**

Have you ever patented any of your ideas or innovations?

- 1 yes
- 2 no

**E9y** (if E9x=yes)

Could you please indicate your patent title/s and number/s?

Patent title: \_\_\_\_\_

Patent number: \_\_\_\_\_

**E10**

Would you like to be notified of our research findings?  
 (We will send our research report to your e-mail address)

- 1  Yes, send the report to .....(e-mail address)
- 2  No, thanks

**End**

This is the end of the survey. Many thanks for your co-operation.