Albertans' Opinions about Virtual Reality

Alberta Public Opinion Study – October 2019

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Citizen Society Research Lab

Virtual Reality
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Executive Summary

A significant proportion of Albertans (40.3%) is open to experiencing virtual reality in the next year. Men more so than women, and the young much more than the old.

Approximately one in seven Albertans (14.1%) is likely to purchase virtual reality equipment in the next year. Again, men more than women, and the young much more than the old.

A substantial majority of Albertans (75.4%) see benefits to virtual reality beyond entertainment.

Opinions about VR	Try VR		Buy VR		Benefits	
	2018	2019	2018	2019	2018	2019
Agree	43.3	40.3	17.2	14.1	76.2	75.4
Disagree	56.7	59.7	82.8	85.9	23.8	24.6

Methodology

Population: The province of Alberta has a total population of 4,371,316 residents (Statistics Canada, 2019) approximately 78% of which are 18 years of age or older for an adult population of 3,409,626.

Sample: Data were collected by Lethbridge College students in the fall of 2019. Students interviewed 953 adult Alberta residents by telephone from October 5 to 10, 2019 under the supervision of principal investigator Dr. Faron Ellis, Research Chair, Citizen Society Research Lab. Landline, hybrid and mobile telephone numbers were selected from a sample drawn from InfoGroup directories and supplemented by CSRL lists. We sincerely thank all participants who took time out of their day to respond to our inquiries. Further results from this study and results from past studies can be accessed by visiting the CSRL web pages at: www.lethbridgecollege.ca

Representativeness: Analysis of the demographic data indicates that, within acceptable limits, the sample accurately represents the demographic distribution of the adult population within the province of Alberta. The sample has been statistically weighted where necessary to even better reflect the demographic distribution of the population (gender, area of province and age).

Confidence: The weighted sample yields a margin of error ± 3.17 percentage points, 19 times out of 20. The margin of error increases when analyzing sub-samples of the data (Calgary ± 6.1 percentage points, Edmonton and immediate area ± 6.5 percentage points, North ± 6.6 percentage points, South ± 6.2 percentage points 19 times out of 20).

IB Commons Call Centre: Students conducted interviews using the facilities of the Lethbridge College IB Commons Call Centre. We thank members of Lethbridge College's ITS and AV teams for their support in helping maintain the IB Commons Call Center.

Sponsorship: These data are part of a larger study of the opinions and attitudes of Alberta residents conducted by the Citizen Society Research Lab at Lethbridge College. These questions were derived from student and faculty interest in the topics.

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Albertans' Perspectives on Virtual Reality Use and Benefits

Likelihood of Experiencing VR in the Next 12 Months

Approximately two of every five adult Albertans (40.3%) believe they will likely experience VR in the next year. More than one in five (22.1%) strongly agree they will experience VR within the next year while nearly a further one-fifth (18.2%) think they are somewhat likely to try VR in the next year. Two of every five Albertans (41.1%) strongly disagree that they'll try VR while a further one-fifth somewhat disagree (18.5%). Only 4.1% didn't know while 1.6% refused to answer question, these cases have been removed from the tabular data below.

Men (47.5%), younger Albertans (63.3% for 18 to 29 year olds) and upper-income Albertans (47.14%) are more likely to consider a VR experience than are women (33.0%), seniors (13.39%) and middle-income earners (39.9%).

Likely to Experience VR in Next 12 Months (2019) (%)

Gender*	Male	Female	All Albertans
Agree	47.5	33.0	40.3
Disagree	52.5	67.0	59.7

Household Income	Under $60,000	$60,000 to $120,000	Over $120,000
Agree	44.3	39.9	47.1
Disagree	55.7	60.1	52.9

Religious Participation	2-3 times/month-more	Several times/year	Rarely-never
Agree	38.0	47.1	39.1
Disagree	62.0	52.9	60.9

Education	High School or less	Some Post-secondary	College-Tech-Trade	University Grad
Agree	41.7	41.5	39.7	39.6
Disagree	58.3	58.5	60.3	60.4

Age	18-29	30-44	45-64	65 and older
Agree	63.3	59.3	30.4	13.3
Disagree	36.7	40.7	69.6	86.7

Area of Province	Calgary	Edmonton	North	South	All Albertans
Agree	43.2	33.7	41.5	44.1	40.3
Disagree	56.8	66.3	58.5	55.9	59.7

Provincial Vote*	UCP	NDP	Liberal	AB Party	Undecided
Agree	35.8	35.1	55.0	71.7	46.9
Disagree	64.2	64.9	45.0	28.3	53.1

Notes: Due to rounding, proportions may not total exactly 100%; * sig < 0.05

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Likely to Experience VR in Next 12 Months (2019 full tabular data) (%)

Gender*	Male	Female	All Albertans
Strongly agree	28.3	15.7	22.1
Somewhat agree	19.1	17.4	18.2
Somewhat disagree	18.0	19.0	18.5
Strongly disagree	34.6	47.9	41.1

Household Income	Under $60,000	$60,000 to $120,000	Over $120,000
Strongly agree	26.0	23.8	22.4
Somewhat agree	18.3	16.3	24.5
Somewhat disagree	17.6	20.8	14.6
Strongly disagree	38.2	39.1	38.5

Religious Participation	2-3 times/month-more	Several times/year	Rarely-never
Strongly agree	21.2	24.0	21.9
Somewhat agree	16.8	23.0	17.3
Somewhat disagree	20.8	19.1	16.8
Strongly disagree	41.2	33.8	44.0

Education	High School or less	Some Post-secondary	College-Tech-Trade	University Grad
Strongly agree	28.3	21.3	20.5	20.8
Somewhat agree	13.2	20.2	19.2	18.8
Somewhat disagree	17.8	18.1	17.4	20.2
Strongly disagree	40.8	40.4	42.9	40.2

Age*	18-29	30-44	45-64	65 and older
Strongly agree	39.6	34.2	13.9	5.6
Somewhat agree	24.2	25.6	16.5	7.7
Somewhat disagree	17.9	14.6	21.6	17.9
Strongly disagree	18.4	25.6	48.0	68.9

Area of Province	Calgary	Edmonton	North	South	All Albertans
Strongly agree	24.3	19.4	21.6	23.2	22.1
Somewhat agree	18.7	14.2	20.1	20.7	18.2
Somewhat disagree	17.1	17.4	17.6	22.7	18.5
Strongly disagree	39.8	49.0	40.7	33.5	41.1

Notes: Due to rounding, proportions may not total exactly 100%; * sig < 0.05

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Likely to Purchase VR Equipment in Next 12 Months

Approximately one in seven Albertans (14.1%) agreed that they will likely purchase VR equipment in the next year (6.3% strongly agree while 7.8% somewhat agree.) Although the vast majority of Albertans (85.9%) are not currently contemplating a VR device purchase, and one percent already own a VR device (1.1%) significant pockets of potential VR equipment buyers exist in expected subgroups of the population (2.0% didn't know while 2.0% refused to answer question).

For example, one-fifth of the youth (20.9%) and a quarter (24.1%) of 30 to 45 year olds are considering a VR equipment purchase in the next year. Older residents are much less likely to be considering a VR purchase with seniors (4.3%) least likely. Also, nearly one-fifth of lower-income Albertans (19.0%) are likely to purchase VR equipment, significantly more than the 11.6% of upper-income earners thinking similarly.

Likely to Purchase VR device in next 12 months (2019) (%)

Gender*	Male	Female	All Albertans		
Agree	18.5	9.6	14.1		
Disagree	81.5	90.4	85.9		

Household Income*	Under $60,000	$60,000 to $120,000	Over $120,000		
Agree	19.0	14.2	11.6		
Disagree	81.0	85.8	88.4		

Religious Participation*	2-3 times/month-more	Several times/year	Rarely-never		
Agree	17.5	17.0	10.5		
Disagree	82.5	83.0	89.5		

Education*	High School or less	Some Post-secondary	College-Tech-Trade	University Grad	
Agree	22.3	12.2	12.1	12.4	
Disagree	77.7	87.8	87.9	87.6	

Age*	18-29	30-44	45-64	65 and older	
Agree	20.9	24.1	8.8	4.3	
Disagree	79.1	75.9	91.2	95.7	

Area of Province	Calgary	Edmonton	North	South	All Albertans
Agree	15.5	11.6	14.4	15.1	14.1
Disagree	84.5	88.4	85.6	84.9	85.9

Provincial Vote*	UCP	NDP	Liberal	AB Party	Undecided
Agree	10.3	13.4	41.9	19.1	14.8
Disagree	89.7	86.6	58.1	80.9	85.2

Notes: Due to rounding, proportions may not total exactly 100%; * sig < 0.05

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Likely to Purchase VR Equipment in Next 12 Months (2019 full tabular data) (%)

Gender*	Male	Female	All Albertans	
Strongly agree	8.6	4.0	6.3	
Somewhat agree	9.9	5.6	7.8	
Somewhat disagree	22.5	14.8	18.8	
Strongly disagree	59.0	75.6	67.1	

Household Income	Under $60,000	$60,000 to $120,000	Over $120,000	
Strongly agree	10.0	4.6	5.8	
Somewhat agree	8.9	9.9	5.8	
Somewhat disagree	16.3	21.1	24.3	
Strongly disagree	64.8	64.5	64.0	

Religious Participation*	2-3 times/month-more	Several times/year	Rarely-never	
Strongly agree	6.2	9.8	4.6	
Somewhat agree	11.2	6.8	5.9	
Somewhat disagree	22.1	21.5	17.6	
Strongly disagree	60.5	62.0	72.0	

Education	High School or less	Some Post-secondary	College-Tech-Trade	University Grad
Strongly agree	13.4	8.0	3.1	4.2
Somewhat agree	8.9	4.3	9.4	8.0
Somewhat disagree	17.8	16.0	18.8	21.4
Strongly disagree	59.9	71.8	68.8	66.5

Age*	18-29	30-44	45-64	65 and older
Strongly agree	9.2	11.3	4.4	1.4
Somewhat agree	11.7	12.8	4.7	2.9
Somewhat disagree	26.7	26.2	15.0	9.1
Strongly disagree	52.4	49.7	75.9	86.5

Area of Province	Calgary	Edmonton	North	South	All Albertans
Strongly agree	6.8	5.4	6.9	6.5	6.3
Somewhat agree	8.8	6.2	7.9	8.5	7.8
Somewhat disagree	21.9	18.2	13.8	20.6	18.8
Strongly disagree	62.5	70.2	71.4	64.3	67.1

Notes: Due to rounding, proportions may not total exactly 100%; * sig < 0.05

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Benefits of VR Beyond Entertainment

A significant majority of Albertans (75.4%) think virtual reality offers benefits beyond entertainment, approximately one-quarter disagree (24.4%). A relatively large number of respondents (13.7%) didn't know, while 2.1% refused to answer question. These later cases have been removed from the tabular data below.

Men (78.5%) are slightly more likely to see benefits beyond entertainment than are women (72.3%), while university graduates (81.0%) are more likely to see benefits than are those with less formal education.

Benefits to VR beyond entertainment (2019) (%)

Gender*	Male	Female	All Albertans
Agree	78.5	72.3	75.4
Disagree	21.5	27.7	24.6

Household Income*	Under $60,000	$60,000 to $120,000	Over $120,000
Agree	70.7	78.9	84.9
Disagree	29.3	21.1	15.1

Religious Participation	2-3 times/month-more	Several times/year	Rarely-never
Agree	77.9	69.7	79.0
Disagree	22.1	30.3	21.0

Education*	High School or less	Some Post-secondary	College-Tech-Trade	University Grad
Agree	68.1	71.2	77.1	81.0
Disagree	31.9	28.8	22.9	19.0

Age*	18-29	30-44	45-64	65 and older
Agree	72.8	86.8	78.1	62.4
Disagree	27.2	13.2	21.9	37.6

Area of Province	Calgary	Edmonton	North	South	All Albertans
Agree	76.4	76.2	71.8	76.7	76.4
Disagree	23.6	23.8	28.2	23.3	23.6

Provincial Vote	UCP	NDP	Liberal	AB Party	Undecided
Agree	74.1	78.6	85.5	69.0	78.4
Disagree	25.9	21.4	14.5	31.0	21.6

Notes: Due to rounding, proportions may not total exactly 100%; * sig < 0.05

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Benefits of VR Beyond Entertainment (2019 full tabular data) (%)

Gender*	Male	Female	All Albertans
Strongly agree	42.0	29.5	36.0
Somewhat agree	36.3	42.8	39.4
Somewhat disagree	10.3	12.6	11.4
Strongly disagree	11.5	15.1	13.2

Household Income*	Under $60,000	$60,000 to $120,000	Over $120,000
Strongly agree	29.7	38.3	44.8
Somewhat agree	41.0	40.9	39.7
Somewhat disagree	14.2	10.4	8.6
Strongly disagree	15.1	10.4	6.9

Religious Participation	2-3 times/month-more	Several times/year	Rarely-never
Strongly agree	33.2	33.3	40.9
Somewhat agree	44.7	36.6	38.3
Somewhat disagree	10.6	13.7	10.7
Strongly disagree	11.5	16.4	10.1

Education*	High School or less	Some Post-secondary	College-Tech-Trade	University Grad
Strongly agree	31.9	31.2	33.7	42.4
Somewhat agree	36.3	40.0	43.5	38.5
Somewhat disagree	13.3	10.6	13.0	9.5
Strongly disagree	18.5	18.2	9.8	9.5

Age*	18-29	30-44	45-64	65 and older
Strongly agree	36.4	47.1	39.1	21.0
Somewhat agree	36.4	39.7	38.7	41.4
Somewhat disagree	14.9	7.9	11.5	10.8
Strongly disagree	12.3	5.3	10.7	26.8

Area of Province	Calgary	Edmonton	North	South	All Albertans
Strongly agree	39.7	37.5	29.9	35.6	36.0
Somewhat agree	36.7	38.4	42.5	41.1	39.4
Somewhat disagree	8.7	12.5	13.2	11.7	11.4
Strongly disagree	14.8	11.6	14.4	11.7	13.2

Notes: Due to rounding, proportions may not total exactly 100%; * sig < 0.05

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Demographics (%)

Area of Province		Gender		Income		Education		Age	
Calgary	28.1	Male	50.3	Under $60,000	35.2	H-School/less	17.2	18-29	23.4
Edmonton	28.2	Female	49.3	$60-$120,000	40.0	Some P-Sec.	20.7	30-44	22.2
North	22.0	Other	0.4	Over $120,000	24.8	Col-Tech-Grad	24.8	45-64	30.7
South	21.7					University Grad	37.2	65 or older	23.7

Mean age = 48 years

Religious Participation	
2-3/month-more	30.1
Several/year	24.0
Rarely-never	45.8

Note: Due to rounding, proportions may not total exactly 100%

Questions

Thinking for a moment about Virtual Reality entertainment…

Virtual reality is the creation of a virtual environment presented to our senses in such a way that we experience it as if we were really there. This environment allows a person to explore, manipulate objects, and perform actions through technology such as a VR headset and handheld control devices. Please tell me how much you agree or disagree with the following statements:

- I am likely to experience virtual reality in the next year (12 months).

- I am likely to purchase a virtual reality headset in the next year (12 months).

- There are benefits to virtual reality beyond entertainment.

  o Strongly Agree
  o Somewhat Agree
  o Somewhat Disagree
  o Strongly Disagree
  o don't know (unprompted)
  o refused (unprompted)

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