



Nordic Skiing – Final Report Out

PROJECT OBJECTIVE

“Grow the sport of Cross Country skiing in the Upper Valley utilizing best practices from Norway – the birthplace of the sport”



PROJECT PHASES

1

Understand the Norwegian Way

2

Assess feasibility of applying learnings to Upper Valley

3

Gain cross-functional consensus on path forward



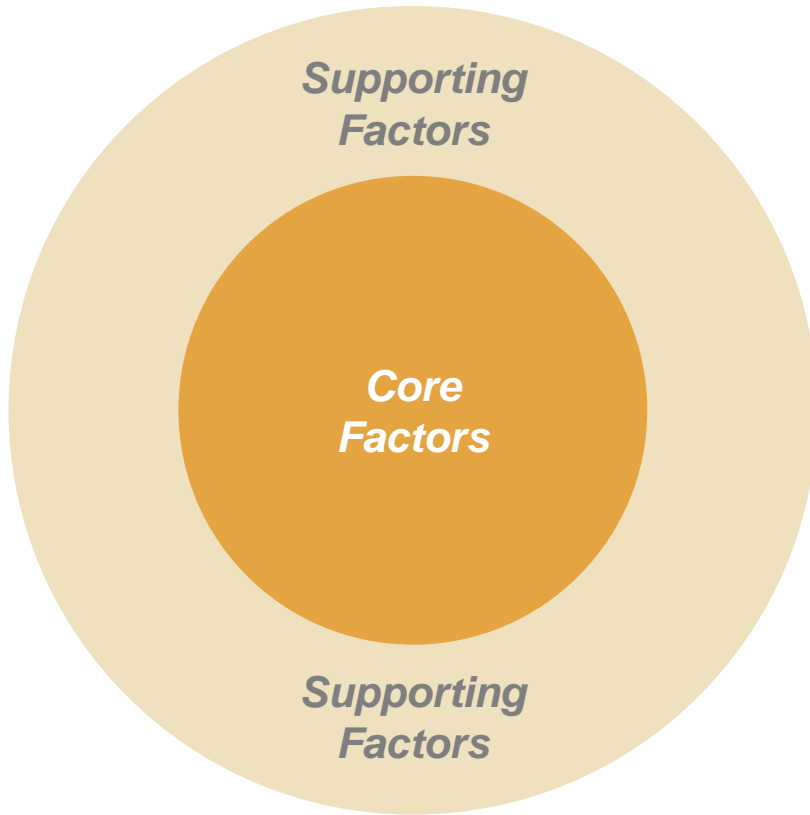
LESSONS LEARNED: NORWAY





Data gathered from interviews allowed us to see that not all elements of Nordic skiing have the same impact

Data Categorization Technique *(primary and secondary data)*



Core Factor Characteristics

Supporting Factor Characteristics

1

In absence of factor, XC becomes dramatically less popular

In absence of factor, XC may become less popular

2

Typically interwoven with other core and supporting factors

Could be independent or connected to other factors to create impact

3

Ingrained in the DNA or the culture of a geography

Can generally be built or created with increasing popularity

Rationale: Certain elements go a longer way in contributing to the deep rooted nature of the XC skiing than others



Deeply held values and family tradition contribute to the notion that Norwegians are “born with skis on”

1

Heritage

Nordic skiing is considered a national identity for the country and has been a tradition here for hundreds of years. It became a symbol of unity at the time of Norway’s independence from Sweden

2

Values

Family time in the outdoors and a healthy lifestyle are deep values held by the Norwegian culture. The mentality is evidenced in government funding and conservation efforts

3

“Fun with Skis”

Children do not compete at a young age but rather they are taught to only have fun on their skis. This teaches them the fundamental balance skills and promotes a fun experience over competitiveness

4

Volunteering

Sports clubs and competitions at all levels are driven primarily by volunteers who want to see the sport succeed. Professional athletes alike give back to youth development efforts

*Core:
Cultural Values
and Traditions*



Norway has developed top-notch systems and events to support the values and traditions around skiing

5

Infrastructure

Thousands of kilometers of groomed trails loop through Norway at no cost to the people. Huts can be found along paths to welcome skiers and promote the inclusive-family culture

6

Competitive Events

From the Holmenkollen World Championships to the Birkebeiner race, Norway is home to competitive races of all sizes. International audiences are eager to travel and see the country

7

Ski Schools

There are ample opportunities to develop skiers at the highest levels. The most competitive, highest potential athletes attend custom high schools designed to build future champions

8

National Success

From the beginning of the sport, Norway is proud to have won many Olympic medals and set countless world records for skiing achievements. Children look up to these athletes as role models

*Core:
Tangible Systems
and Events*



A variety of organizations and venues allow the sport to permeate and make skiing more accessible

1 Sports Clubs

With equal access to clubs, Norwegian kids have the opportunity to play several sports without being ranked, allowing kids to have fun with friends and determine what sport is best for them

2 Ski Associations

Ski associations significantly enhance the physical infrastructure by grooming local tracks; they also try to activate the kids at a very young age by designing programs aimed to develop love for the outdoors

3 Venues

Venues enable Norway to host iconic events such as the Hollmenkollen festival; several other facilities boost access to skiing, including arenas for kids and those who are elite

4 Government Organizations

With a focus on public health, the Norwegian government has several initiatives aimed for skiers, including subsidizing clubs using lottery revenue and awarding stipends to those who want to turn pro

5 Inclusivity

Through various programs ski associations and sports clubs assist socially vulnerable groups and new immigrants engage in sports activities by providing equipment and coaching

**Support:
Organizational
Factors**



Interest in skiing is maintained by a few other factors that allow the public to be further engaged

6

Equipment

A well functioning secondary market keeps purchase costs low and benefits parents facing frequent repurchases due to children's rapid size change

7

Network Effects

Significant network effect helps activate children who don't have skiing tradition in their families; the underlying movement supports the "Joy of Sport – for All"

8

Media Coverage

Nationwide media coverage of significant skiing events maintains interest and awareness in skiing and increase attractiveness of the sport to Sponsors

9

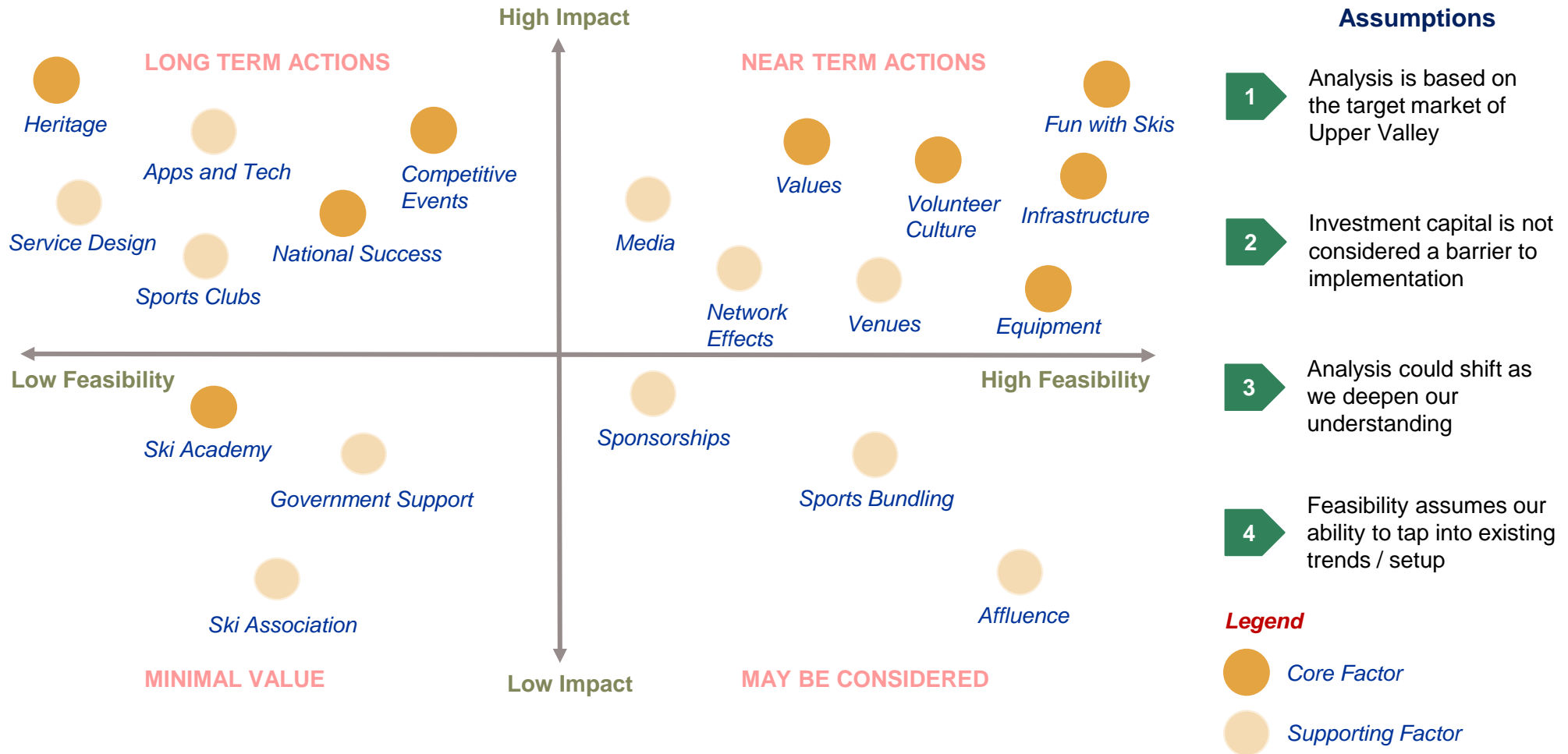
Sponsorships

Broad media coverage and growing attendance of competitive events makes the sport attractive for both local as well as international sponsors

**Support:
Interest /
Sustain Factors**



We rationalized our these factors so we can focus on a select few opportunities that can proselytize XC skiing in the US



Rationale: Impact vs. Feasibility

- Key to understand what attributes can be leveraged in the US culture and how impactful they would be relative to other options
- We need to evaluate these attributes against feasibility of implementing options considering cultural, geographical or other resource constraints



We set our eyes on performing market research on high impact and feasibility areas we hypothesized will yield useful insight

Factors

Next Steps / Research Method

Representativeness of available US resources



Fun with Skis

Observe current structure of ski practices at Ford Sayre talk to schools about introducing elementary students to Nordic skiing



Values

Meet with local government to learn about public health promotion, talk to schools about current initiatives to keep kids active and research how SoulCycle and other fitness companies took off



Affordable Equipment

Meet with Swix and other manufacturers to understand distribution and how their marketing efforts align with new market entry



Volunteer Culture

Talk to Ford Sayer and other local clubs about current involvement of parent volunteers versus paid officials and coaches



Infrastructure

Conduct a survey to determine current barriers to skiing and administer it to park boards (Storrs Pond, Greenway) and DOC



Venues

Conduct a survey to understand value of venues such as Lake Placid to market segments

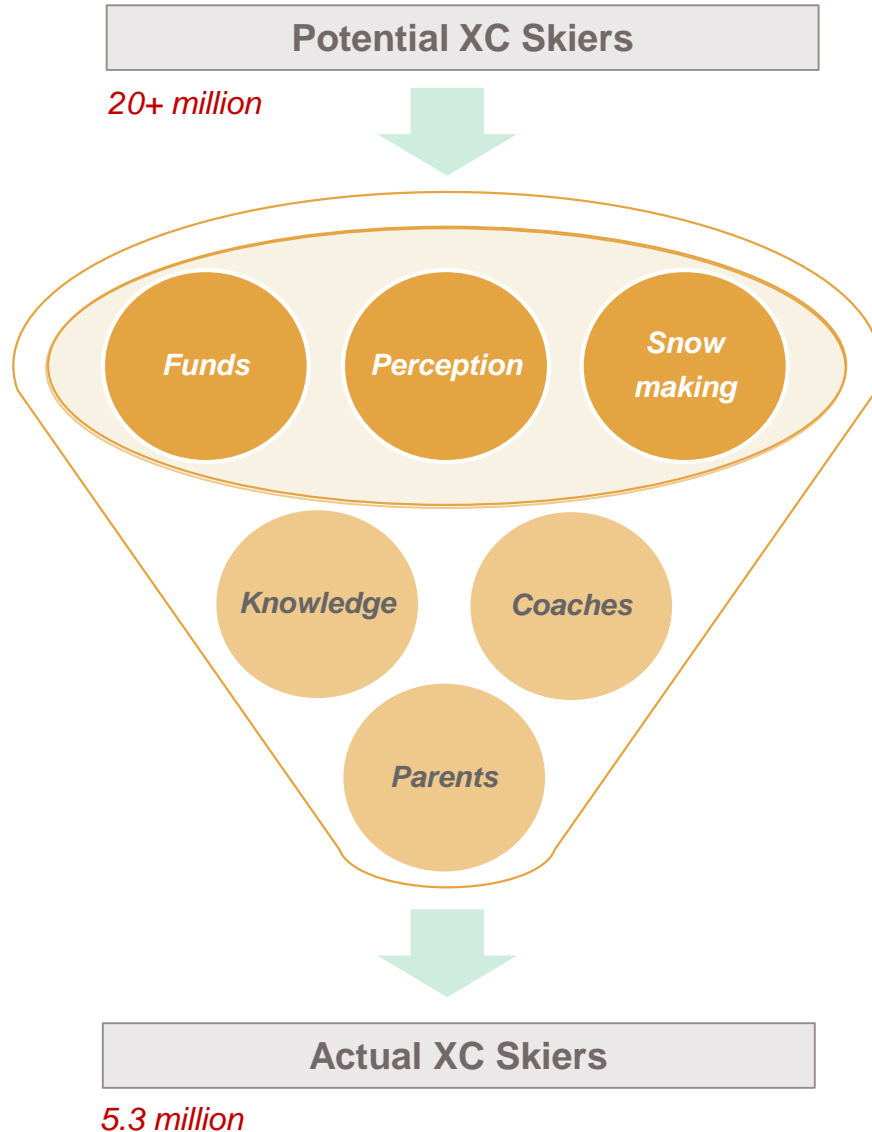


INSIGHTS FROM UPPER VALLEY





Consistent with our hypothesis, we saw there was not a dominant reason for lack of growth, but rather an interplay of several factors



Biggest Insights

- 1 Parent are competitive and drive kids to become “one sport wonders”; they also perceive sport as not safe
- 2 Cost of snowmaking coupled with unpredictable weather often restricts practice to < 12 times / year
- 3 Lack of knowledge about where to go and what equipment to buy confuses likely skiers
- 4 Volunteerism in the sport seldom lasts past the duration of kids’ involvement
- 5 Golf greenskeepers are skeptical of grooming on course, restricting access to 100s of would-be venues

Core Factor(s) Explored





Allocation of public health funds is decentralized; if there is demand for an initiative, the local government would fund it

Problem in a Nutshell:



State government prioritizes resources for pressing issues



Local government allocates funds where there is demand



Parents are shifting to sports that provide 1:1 coaching



Parents must perceive sport as safe with feasible entry



Sports like Tennis, Golf, Soccer take precedence over skiing



What we learned

Health Council

14-town council collectively aligns on health priorities such as diet and fitness

Parents

Parents' involvement forces kids to focus on sports with more resources

Venues

If the town has sufficient demand for the venue, the municipality will fund it

Schools

Focus is driven by demand, coach reliability, ability to participate and affordability

What we plan to learn

Maine XC Ctr.

Talk to founder of Maine Winter Sports to understand how funds were raised from govt.

Principals

Understand how principals prioritize sports and evaluate safety / public health benefits

Core Factor(s) Explored

Health

Fun w/ Skis

Media

Volunteer

Infrastructure

Venues

Equipment



Lack of trained coaches and funding and an increased need for ranking result in loss of interest amongst kids 7 and above

Problem in a Nutshell:



Lack of skilled coaches that motivate kids to learn



After 3rd grade, kids require more trainings and are timed and ranked



Few clubs in the area have very fast skiers or funding



Parents are hyper-competitive and lack proper knowledge



High rate of dropouts between 2nd and 3rd grade



What we learned

Other Sports

Kids tend to have more fun with sports that their friends play, such as football

Ranking

Everyone, including parents and NENSA, drives kids to be ranked from KG

Funding

Grants are scarce, preventing clubs from investing in innovative coaches or techniques

Sport Idols

Kids have no access to Olympic athletes such as Paddy or Jessie for aspiration

What we plan to learn

Recruiting

Attend the Bill Koch League District Chair Meeting to understand youth recruiting

Funding

Understand funding sources / capacity util. rates by visiting Craftsbury and Rikert

Core Factor(s) Explored

Health

Fun w/ Skis

Media

Volunteer

Infrastructure

Venues

Equipment



There is simply not enough demand for XC skiing to warrant primetime coverage (or any media coverage at all)

Problem in a Nutshell:



Ski clubs / schools do not have enough marketing resources



Limited public exposure to XC skiing through other avenues



Low rate of viewing (if any) driving lower TV ratings



Limited media coverage targeted just for athletes



General lack of media coverage and thereby public awareness



What we learned

Journalists

Reporters are prior athletes and are not as numerous or influential as other sports

Perception

Skiing is not viewed as a game of skill or strategy compared to other sports

Ads

Low popularity drives minimal ads on TV or social media; exception is pharma companies

Promotion

Even decent skiing venues are not publicized in any form of media

What we plan to learn

Media in Norway

Understand best practices in media coverage in the Norwegian market

Secondary Res.

Conduct secondary research on factors behind uptick of media coverage

Core Factor(s) Explored

Health

Fun w/ Skis

Media

Volunteer

Infrastructure

Venues

Equipment



Attrition in volunteerism is high, driven primarily by how long kids in the family are involved with the sport

Problem in a Nutshell:



Sticky volunteers tend to come from families where skiing is a tradition



Other parents tend to volunteer if their kids are more committed to sport



Lack of knowledge of skiing makes people less willing to help



Volunteering becomes highly transactional



Poor volunteering rates combined with inadequate funding make the community aspect of skiing unsustainable

Insights

What we learned

Culture

With popularity of other sports rising, volunteering culture is deteriorating

Immigrants

Interviews showed that immigrant parents are more likely to volunteer than locals

Structure

Ski clubs do not have a 'fine' for not volunteering to force action

Compensation

Distinction of paid vs. volunteer coaches is if they have kids training in the club

What we plan to learn

Deep Dive

Understand why immigrant parents are more willing to help than locals

Parents

Talk to some parents who do not volunteer for XC skiing at all

Core Factor(s) Explored

Health

Fun w/ Skis

Media

Volunteer

Infrastructure

Venues

Equipment



Current offerings of trails and venues are not optimal for recreational skiing, deterring new skiers from trying the sport

Problem in a Nutshell:



Trails in UV are not well-funded and therefore are not strategically or optimally built



Courses are too difficult for beginners, which intimidates and deters people from trying the sport



Easier venues like golf courses are underutilized due to the belief that skiing ruins the grass



Snowmaking is prohibitively expensive for many venues



Access to recreational skiing is limited and lack of snowmaking capabilities makes conditions unpredictable



Insights

What we learned

Trails

Many trails are either too difficult or not well-lit enough for general public

Design

Current venues do not have trails for both competition and recreation

Homologation

Lack of homologated trails prevents Int. skiers from coming to US and sharing skills

Golf Courses

Weston, MA golf course is turned into XC venue in winter months, driving high traffic

What we plan to learn

Current Practices

Visit Crafsbury, Storrs Pond and Dartmouth Greenway to further explore current venues

Timing Comp.

Talk to owner of timing company to understand their role in infrastructure

Core Factor(s) Explored

Health

Fun w/ Skis

Media

Volunteer

Infrastructure

Venues

Equipment



Skiing could be a cost-prohibitive sport where a lack of education around equipment dissuades people from undertaking skiing

Problem in a Nutshell:



Current level of education on ski equipment is low



Recreational skiers end up either using old skis or renting equipment



Turn over of equipment in rental operations is quite low



Stores carrying XC skis (e.g., REI) stop stocking them due to slumping sales



Ski manufacturers stop marketing to recreational skiers, contributing to lower awareness



What we learned

Cost

Equipment is costly and often high retention in sport comes from wealthier families

Group Buys

Clubs get group discounts, however, additional subsidies could drive interest

Education

An educational campaign on new equipment benefits is being run by the SIA

Ads

Ads are targeted for athletes; would-be skiers only get exposure through word of mouth

What we plan to learn

Fischer

Meeting with National Director of Sales to understand marketing efforts

Swix

Meeting with CEO of Swix USA to understand marketing efforts

Core Factor(s) Explored

Health

Fun w/ Skis

Media

Volunteer

Infrastructure

Venues

Equipment



A few other issues bubbled up in our primary research that were related to our project

“Would-be skiers often don’t have an experienced ‘buddy’; they don’t know where to go and are consequently less likely to try it”

“We need support from the community, just look at what Little League was able to accomplish from the local govt.”

“Just raising awareness is not going to be adequate; various stakeholders will need to be involved to gain traction”

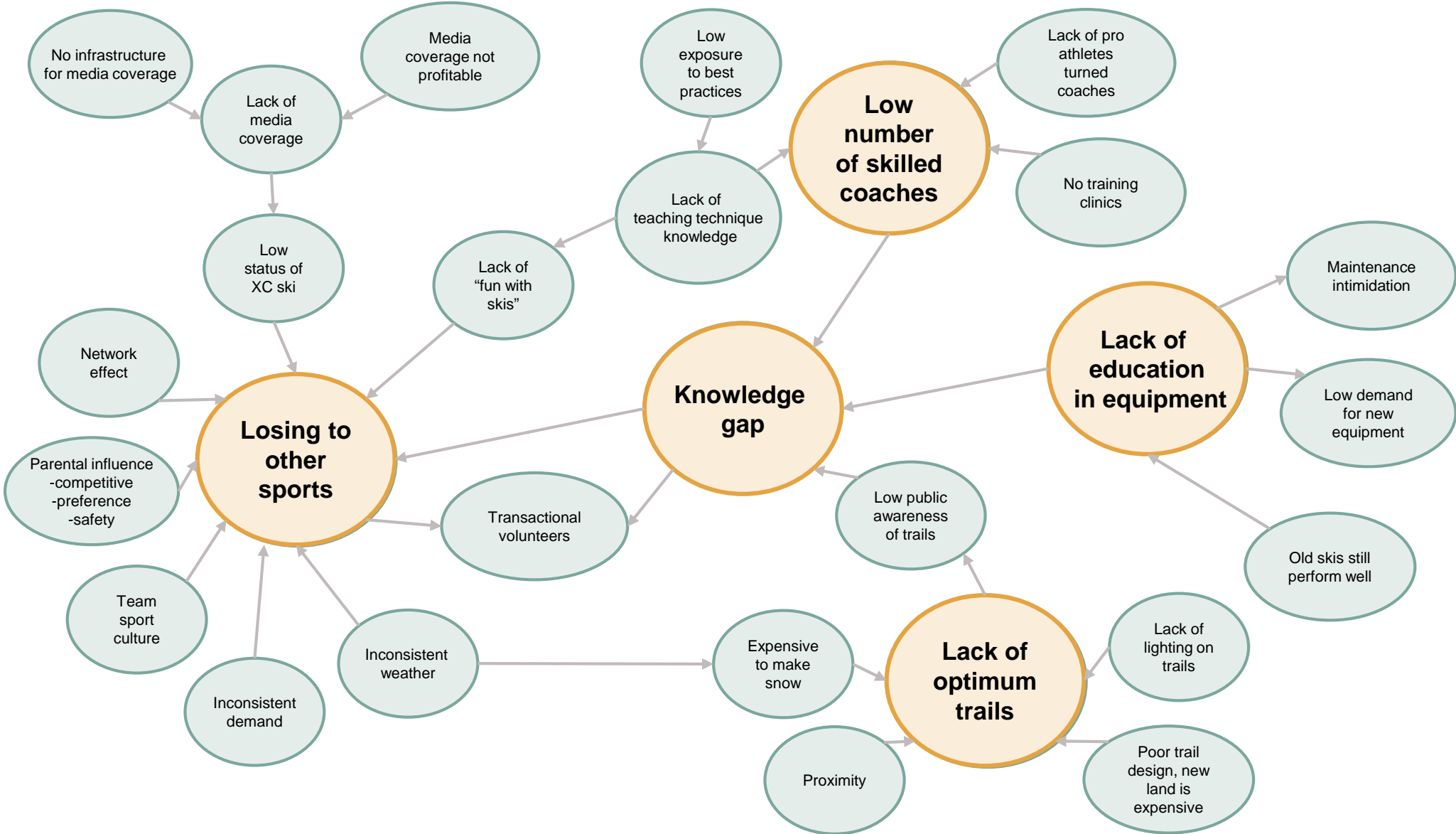
“The US has drifted into a mindset that specialization is the key to success; we need to develop athletes”

“All aspects of skiing are not well integrated; if you are a new skier there is not a consolidated source of information”

“Parents’ involvement in children’s sports can become huge issue. Parents are overly competitive and can force children to burn out”



Ultimately, we mapped how everything we learned resulted in five interlinked barriers to growth





This is a complex problem – five major barriers exist across supply and demand for XC Skiing in the Upper Valley

Supply



Low number of skilled coaches

Lack of education in equipment

Lack of optimum trails

Demand

Knowledge gap

Losing to other sports





Based on our team's interviews and learnings, we identified two recommendations for each barrier

1

Knowledge gap

- Schedule community ski nights, especially when it snows and invite people who don't ski
- Partner with more schools for after-school and weekend programs

2

Lack of education in equipment

- Create comprehensive USSA app and/or website
- Host community clinics to explain ski techniques, bindings, waxing and tuning

3

Lack of optimum trails

- Utilize golf courses for beginner trails
- Invest in infrastructure for parents to relax, kids to put on snow gear, etc.

4

Low number of skilled coaches

- Invite Scandinavian tier two athletes to the US for the winter to coach
- Share and standardize best practices across clubs

5

Losing to other sports

- Promote and market "fun with skis"
- Include Nordic Skiing in gym class curriculum to expose kids to the sport

CONSENSUS BUILDING

We tapped into the expertise of Cross Country Skiing aficionados in the Upper Valley to spark a dialogue in growing the sport via recommendations generated from an Interactive Design Thinking Session





How we executed the Design Thinking Session

- 1 We invited ~40 stakeholders ranging from coaches to athletes to members of the ski associations to our final presentation
- 2 We divided the participants into three diverse groups and assigned them 3 barriers (from our research) to address
- 3 Each person will “voted” for top 2 ideas per barrier; 2-3 most popular ideas per barrier were be shared with entire group
- 4 We will reconvened to discuss each group’s ideas and voted on the overall top idea(s) for each barrier
- 5 Top solutions relating to each barrier will serve as a starting point for future exploration



The Nordic Skiing Community came up with recommendations they think will yield the greatest impact

1

Knowledge gap

- Engage parents in the sport to help them understand opportunities for children
- Share knowledge across key stakeholders including NENSA, club programs, etc.

2

Lack of education in equipment

- Provide free equipment rental to the public
- Host “demo days” where the public can learn about types of skis and ski maintenance

3

Lack of optimum trails

- Invest in snowmaking capabilities
- Develop trails meant for Nordic skiing and for all skill levels

4

Low number of skilled coaches

- Organize coaching clinics to share best practices and techniques
- Offer training for parents to teach them how to coach Nordic skiing

5

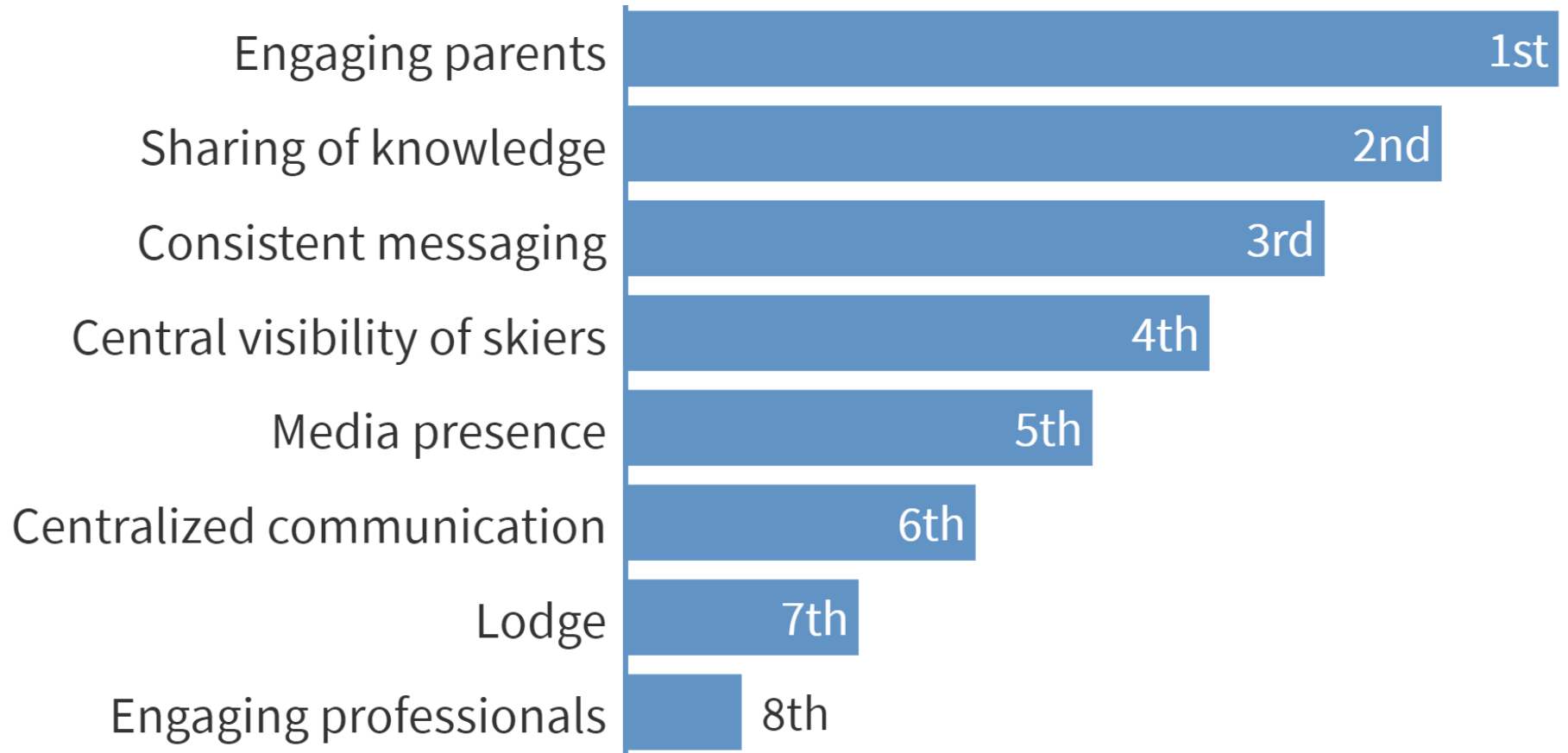
Losing to other sports

- Invest in snowmaking capabilities
- Engage families in the sport to promote Nordic Skiing as a fun family activity



Full list of prioritized solutions to tackle each barrier

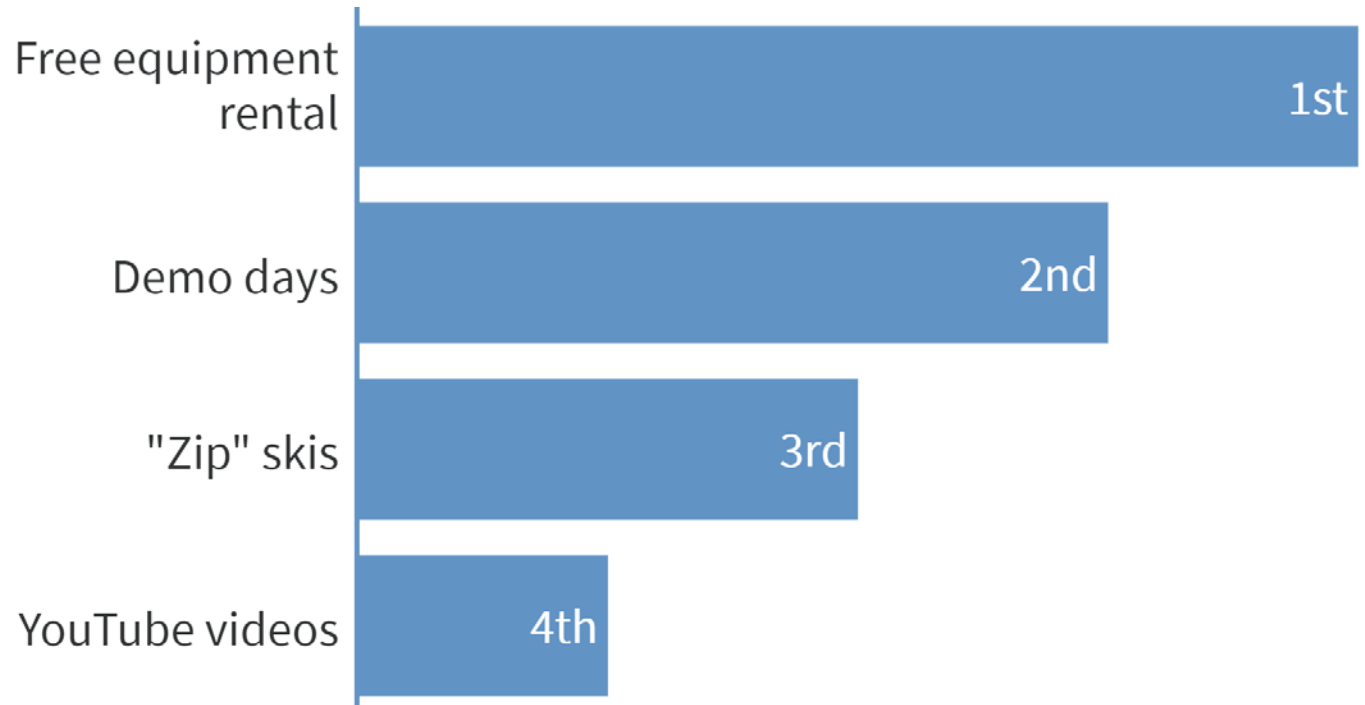
Knowledge Gap





Full list of prioritized solutions to tackle each barrier

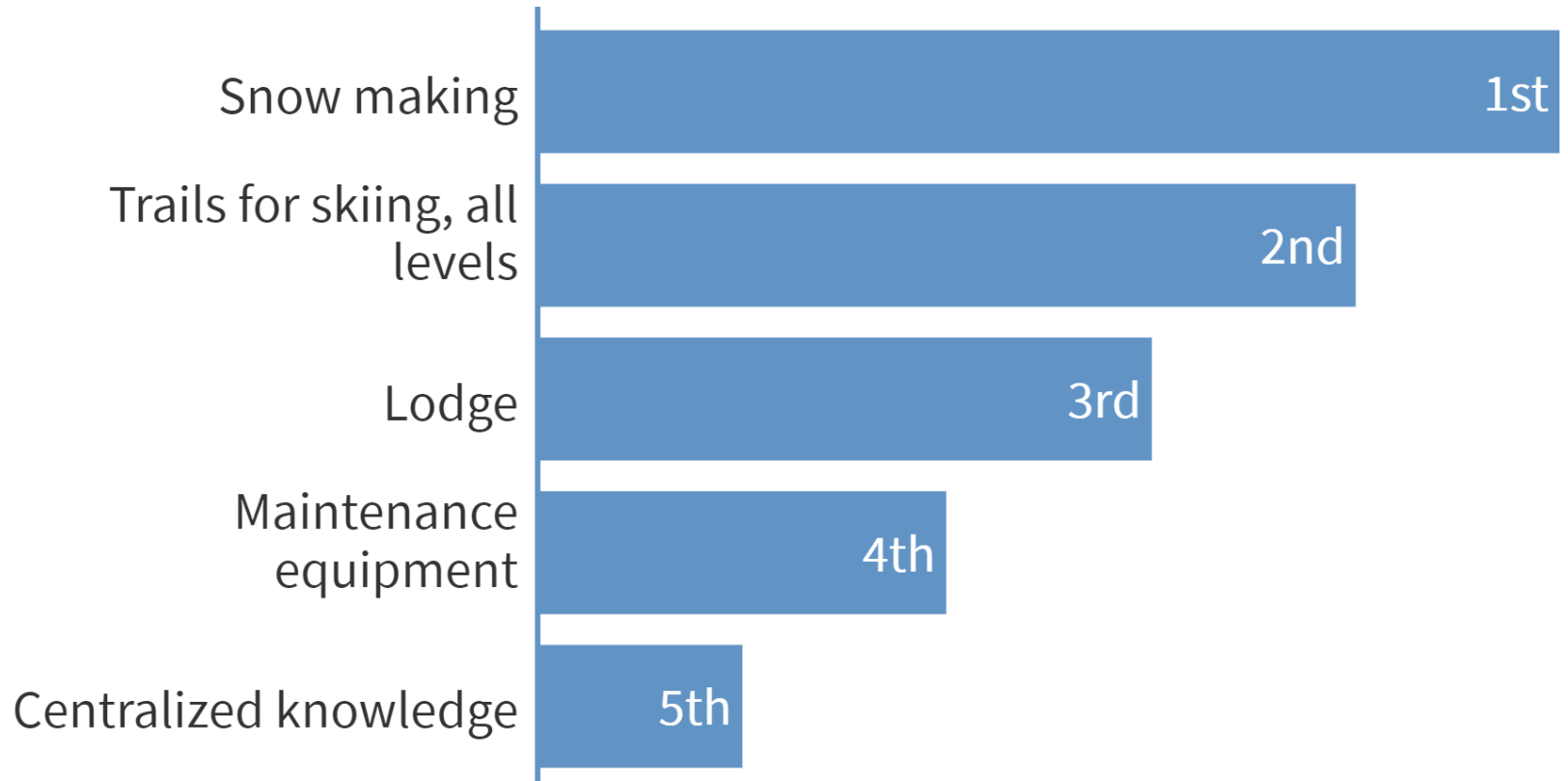
Lack of education in equipment





Full list of prioritized solutions to tackle each barrier

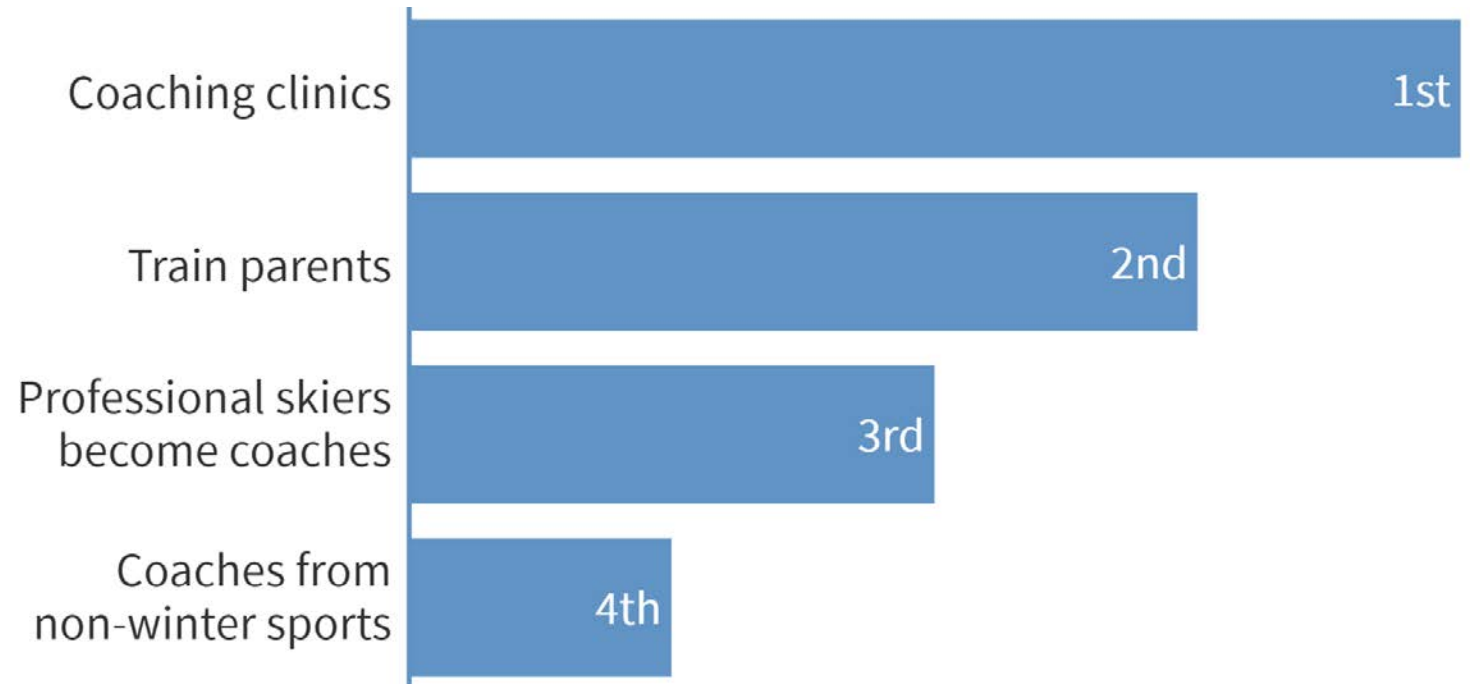
Lack of Optimum Trails





Full list of prioritized solutions to tackle each barrier

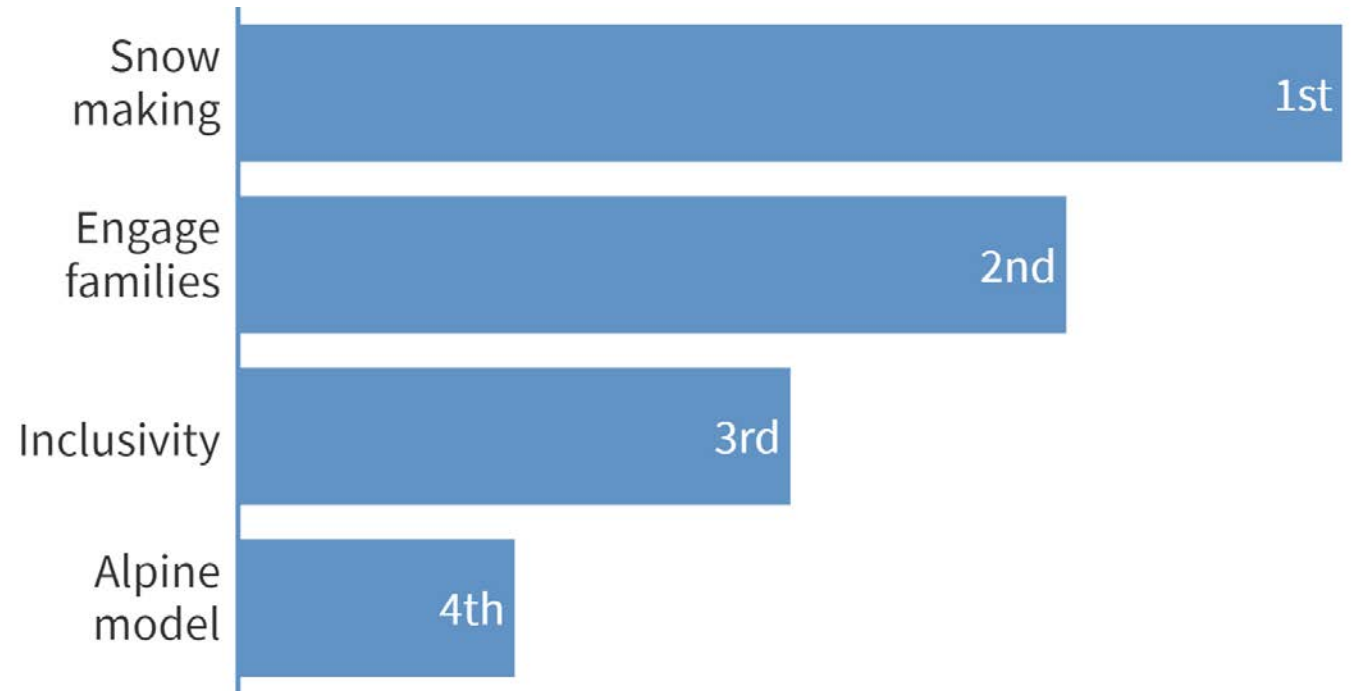
Low number of skilled coaches





Full list of prioritized solutions to tackle each barrier

Losing to other sports



THANK YOU!



Appendix



Operational Definitions – Core Attributes

- Infrastructure
 - There are hundreds of thousands of kilometers of public trails for cross country skiing in Norway
 - Trails have “huts” spread out on them to facilitate taking breaks
 - Norway has also invested in snowmaking gear to combat the effects of climate change
- Competitive Events
 - There are several events beyond just Holmenkollen that bring families together to celebrate the sport and cheer on their favorite athletes
- National Success
 - Norway has a long history of world champions and Olympic medals to celebrate
 - Children here look up to the Olympic athletes as role models and like to mimic their styles
- Ski Academy
 - Norway has special high schools that focus on developing competitive skiers. Students who plan to compete at the highest world levels almost always attend these schools.



Operational Definitions – Core Attributes

□ Heritage

- Nordic Skiing became national sport around same time of independence from Sweden.
- Skiing was traditionally used as a method of transportation in the deep snow conditions in Norway
- The cold and snowy climate continues to support this culture

□ Values

- Nordic skiing is more than a competitive sport but a family event that promotes exercise and bonding
- The city of Oslo has put regulations in place to prevent further commercial or home development to maintain the forest around the city.

□ Fun with Skis

- Nordic children are taught to ski through “skilek” which literally means skiing and playing. They learn to balance by running around on them and often playing soccer with skis on

□ Volunteer Culture

- Skiing in Norway has always relied on volunteers to coordinate events at all levels
- Professional athletes give back as coaches and volunteers to continue developing the sport



Operational Definitions – Supporting Attributes

- Apps & technology
 - Mobile applications facilitate access to tracks by enabling users to follow which tracks are groomed and ready for use
- Media coverage
 - Nationwide media coverage of significant skiing events maintains interest and awareness in skiing and increase attractiveness of the sport to Sponsors
- Sponsorship
 - Broad media coverage and growing attendance of competitive events makes the sport attractive for both local as well as international sponsors
- Government support
 - Government revenues generated from lottery tickets are used to subsidize sports clubs for each member
 - Norwegian government considers sport activities integral part of its public health policy and has a goal to improve physical health through wide offer of local sports and activities
 - State scholarships and stipends are awarded to talented athletes who chose to develop their professional careers in designated sport schools in addition to country wide free education system



Operational Definitions – Supporting Attributes

- Income / Affluence
 - Relative to the US and most European nations, Norway is a more affluent region
- Service Design
 - The Holmenkollen festival focuses on welcoming families through various festival events and exhibits
- Bundling of Sports
 - The Holmenkollen festival combines cross country skiing, biathlon and ski jumping to increase revenue potential and also maintain interest in all three sports
- Dedication to development
 - Competitive Nordic skiing athletes tend to be highly dedicated to their sport including strict training regiments, focused education programs and constant journal entries to track performance data



Operational Definitions – Supporting Attributes

- Sports clubs
 - Vast majority of children and young adults are members of sports clubs- open to everyone
 - Most sports clubs provide opportunity to play different sports rather than focusing on one
 - Parents must pay a membership fee for their children to join a sports club
 - Children are not ranked until the age of 13 which encourages them to play for fun
- Ski associations
 - Ski associations significantly enhance the physical infrastructure by building and grooming local tracks
- Venues
 - Norway is home to one of the sport's iconic venues: Holmenkollen
- Access to affordable equipment
 - A well functioning secondary market keeps purchase costs low and benefits parents facing frequent repurchases due to children's rapid growth through sizes
- Inclusivity (giving opportunity to less privileged) and network effect
 - Through various programs ski associations and sports clubs assist socially vulnerable groups. New immigrants can engage in sports activities because equipment and coaching are often provided at no cost
 - Students tend to stay in sports clubs that their friends are in but often leave teams if they change schools and switch friend groups