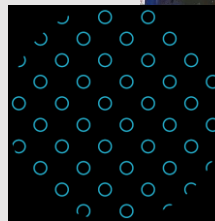
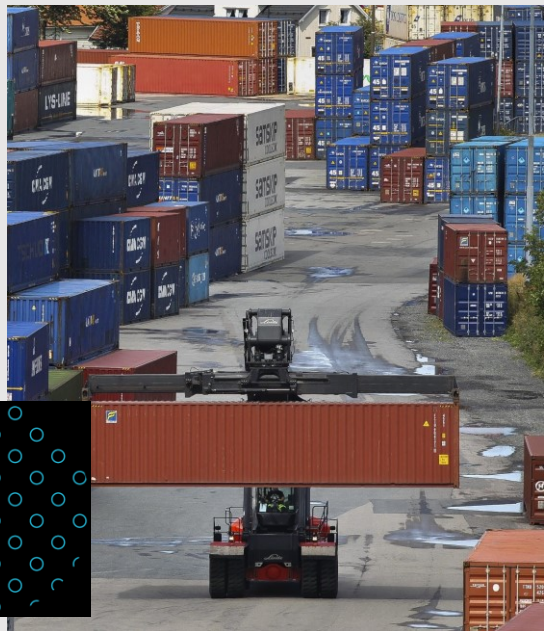


Havner i Norge

- effektivisering av norske havner -

Clemet Thærie Bjorbæk
Assistant Professor

Institutt Maritime Operasjoner –Vestfold
ctb@usn.no



12.09.2018

Arendalsuka 14-08-2018

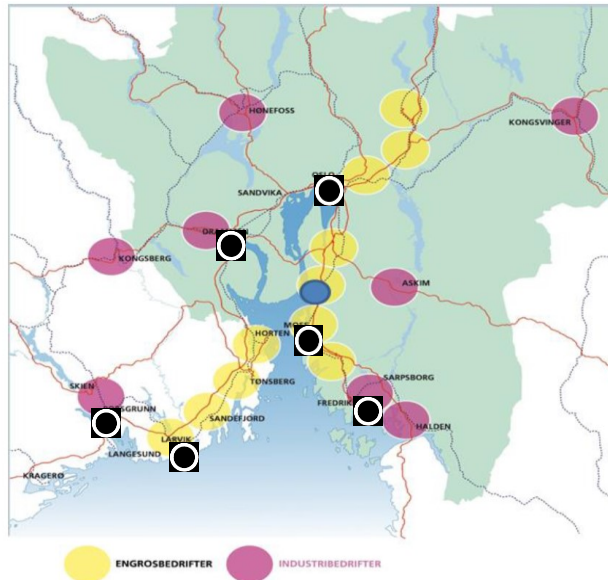
1



Havnestruktur i Norge

- 32 stamnetthavner
- Ca. 100 trafikkhavner
- Ca. 750 fiskerihavner
- + private industrihavner
- + offentlige & private fritidsbåthavner

Næringstrender i Oslofjordområdet



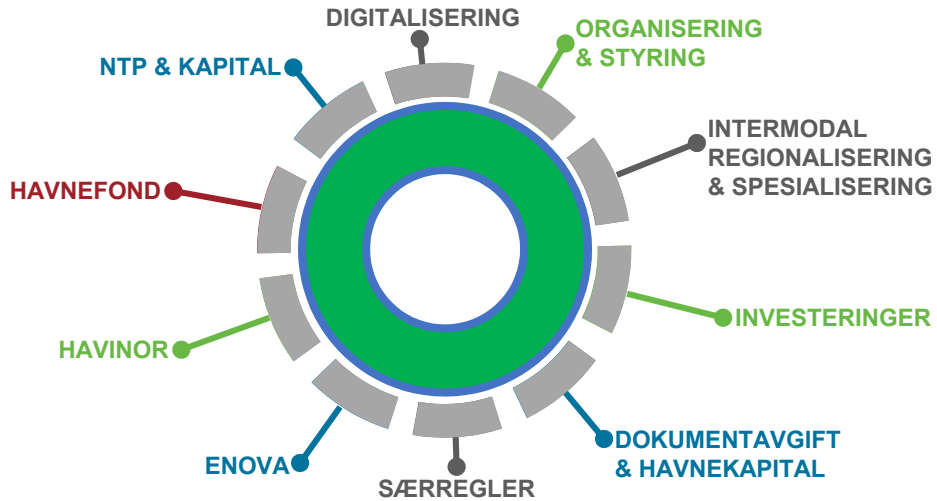
Godsomslag norske havner pr. segment i tonn 2017

Segment	Borg	Moss	Oslo	Drammen	Larvik	Grenland	Kristiansand	Risavika	Karmsund	Bergen	Tønsberg	Egersund
Våt bulk	1.088.952	1.886.497	152.676	3.720.420	356.585	442.718	9.193.455	44.136.227	8.931.542	63.318		
Tørr bulk	1.735.115	73.271	1.743.059	1.569.878	825.299	7.294.311	505.696	934.792	1.793.049	2.851.185	76.668	450.016
Container LOLO	420.243	297.052	1.281.769	199.915	752.957	348.923	419.303	374.343	261.782	172.042	0	49.877
Container RORO	274	0	0	0	0	45.065	23	7.395	182	18.938	0	0
RORO selvgående	0	0	696.578	179.844	664.348	435.260	403.911	225.316	107.675	127.991	0	1.983
Stykkogods	169.777	67.361	269.698	207.366	81.204	80.879	78.881	481.392	643.064	775.944	506	115.234
Sum	3.414.361	437.684	5.877.601	2.309.679	2.323.808	11.924.858	1.764.399	2.465.956	11.999.207	48.082.327	9.008.716	680.428

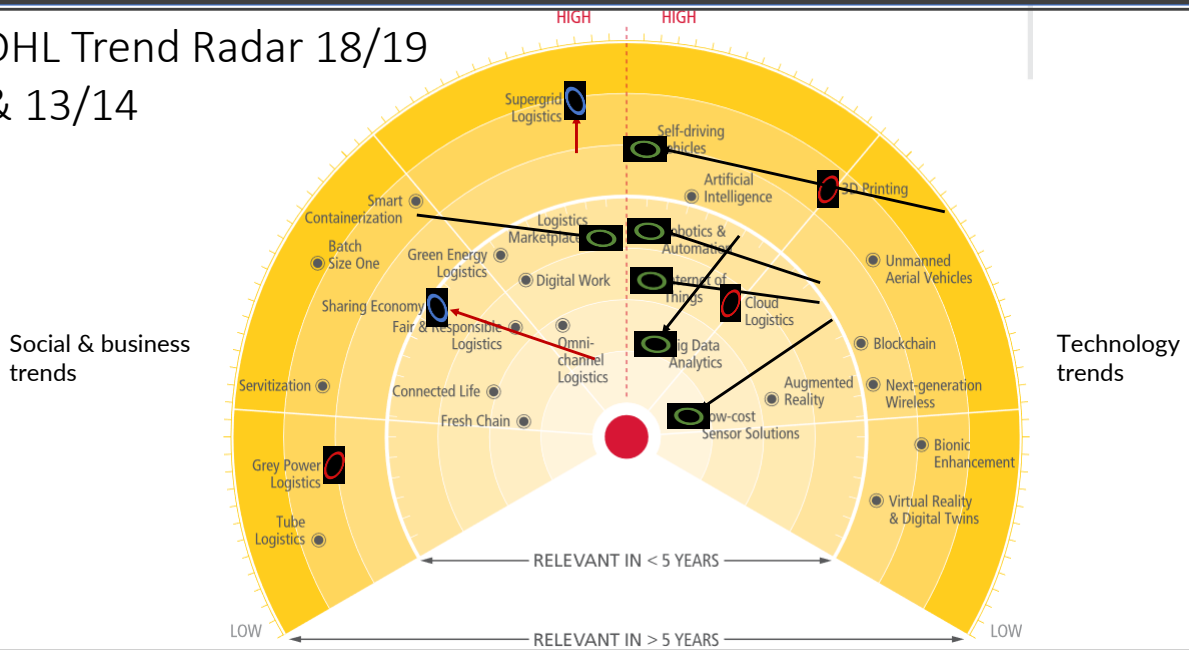
Sauda	Florø	Bremanger	Måløy	Ålesund	Molde	Kristiansund	Trondheim	Brønnøysund	Mosjøen	Mo i Rana	Bodø	Narvik	Harstad	Tromsø	Hammerfest	Sveagruva	Kirkenes
0	469.740	3.421.075	87.461	525.798	3.342.206	2.199.313	679.619	9.253	393.382	128.181	21.330	15.534	205.326	286.177	5.237.094	3.443	55.953
1.102.740	1.128.068	78.166	157.724	519.893	2.918.136	2.351.072	2.809.052	2.111.961	353.120	2.836.365	325.922	21.213.588	350.407	412.538	15.975	104.872	13.968
0	165.325	66.321	124.864	398.818	0	224.393	220.502	0	424.121	140	0	0	5.699	17.641	41	411	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	70	0	0	1.150	2	1.920	12.485	0	0	0	0	0	606	19	0	13	0
0	320.020	6.448	74.284	382.723	51.143	1.602.781	827.338	12.763	187.442	1.268.026	27.818	3.577	51.192	263.927	141.744	7	11.116
1.102.740	2.083.223	3.572.010	444.333	1.828.382	6.311.487	6.379.479	4.548.996	2.133.977	1.358.065	4.232.712	375.071	21.232.699	613.230	980.302	5.394.854	108.746	81.037

- 3** havner opererer i alle 6 segmentene **8** havner opererer i 4 av 6 segmentene **2** havner opererer i 2 av 6 segmentene
8 havner opererer i 5 av 6 segmentene **8** havner opererer i 3 av 6 segmentene **1** havner opererer i 1 av 6 segmentene

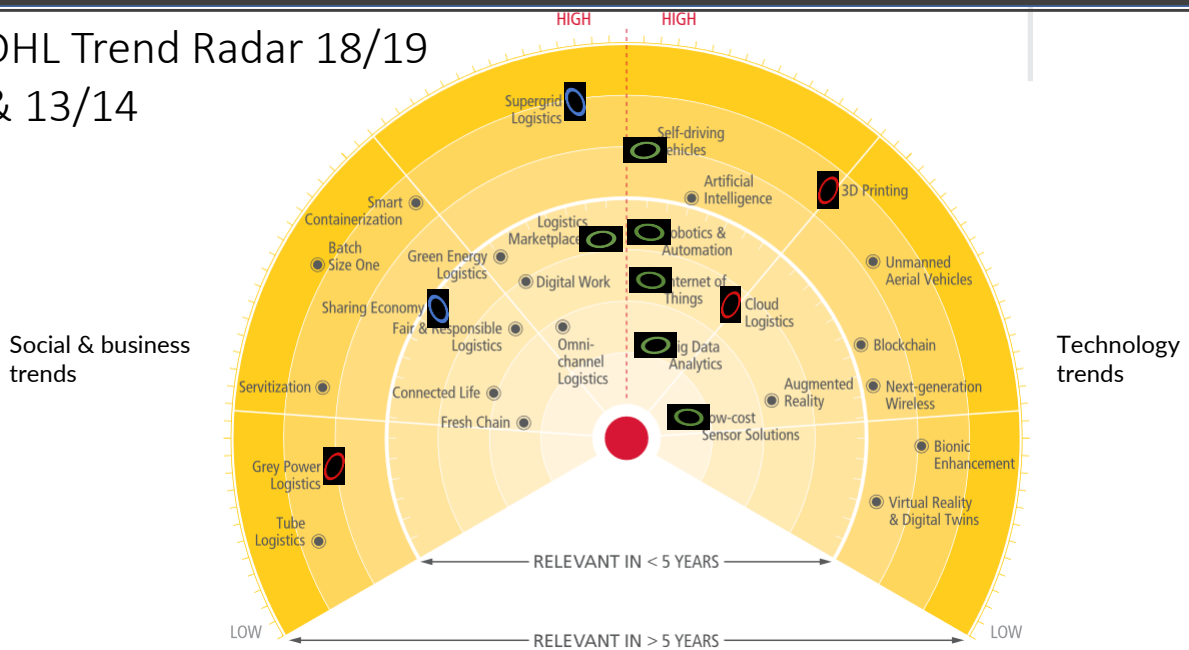
10 viktige effektiviseringsområder for norske havner



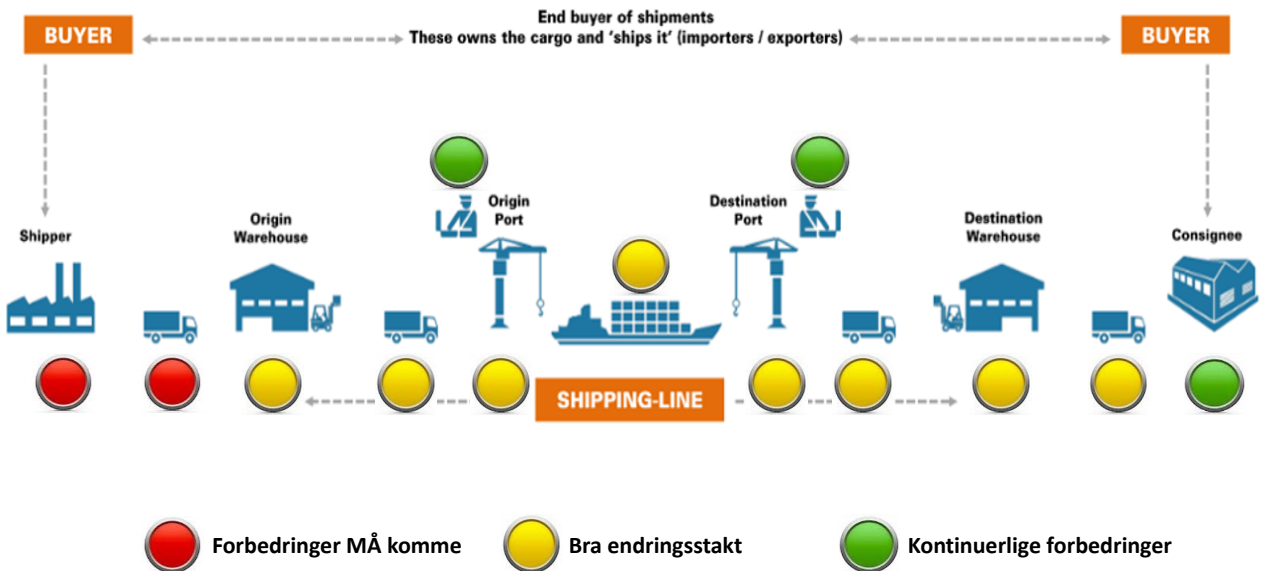
DHL Trend Radar 18/19 & 13/14



DHL Trend Radar 18/19 & 13/14



Digitalisering supply chain



“Innovation will create added value if it addresses your end-customer needs.”

- **Statement is true.** IF it does not meet someone needs is just an academic exercise and is not innovation. Understanding of the end customer should be enlarged (other stakeholders, from supplier to the beneficiary)
- **Innovation is a long run.** On the short term innovation will not produce profit.
- **Innovation is not only for big players.** Even though innovations are initiated/stimulated by bigger players, but need also involvement of small and medium stakeholders.
- **Sharing is slowly becoming a common practice** and will be seeing as a tool for profit.
- **Having financial capacities is not enough;** trust is a key factor for success.
- Collaboration within the maritime supply chain should be done from the same level between the involved actors.
- **Innovation are introduce to create added-value, it should not destroy added-value for the other players in the chain**

“It is not the strongest of the species that survives, nor the most intelligent that survives.
It is the most adaptable to change.”

Charles Darwin