```
ITRON INC /WA/
Form 10-K
February 28, 2019
false--12-31FY20180000780571YesfalseLarge Accelerated FilerITRON INC
0000780571\ 2018-01-01\ 2018-12-31\ 0000780571\ 2018-06-30\ 0000780571\ 2019-01-31\ 0000780571\ 2016-01-01
2016-12-31 0000780571 2017-01-01 2017-12-31 0000780571 us-gaap:ServiceMember 2018-01-01 2018-12-31
0000780571 us-gaap:ProductMember 2017-01-01 2017-12-31 0000780571 us-gaap:ProductMember 2016-01-01
2016-12-31 0000780571 us-gaap:ServiceMember 2017-01-01 2017-12-31 0000780571 us-gaap:ServiceMember
2016-01-01 2016-12-31 0000780571 us-gaap:ProductMember 2018-01-01 2018-12-31 0000780571 2018-12-31
0000780571 2017-12-31 0000780571 us-gaap:ParentMember 2018-01-01 2018-12-31 0000780571
us-gaap:ParentMember 2017-01-01 2017-12-31 0000780571
us-gaap:AccumulatedOtherComprehensiveIncomeMember 2017-12-31 0000780571 us-gaap:CommonStockMember
2015-12-31 0000780571 2015-12-31 0000780571 us-gaap:AccountingStandardsUpdate201609Member
us-gaap:CommonStockIncludingAdditionalPaidInCapitalMember 2017-12-31 0000780571
us-gaap:CommonStockMember 2016-01-01 2016-12-31 0000780571
us-gaap:CommonStockIncludingAdditionalPaidInCapitalMember 2016-12-31 0000780571 us-gaap:ParentMember
2016-01-01 2016-12-31 0000780571 us-gaap:ParentMember 2016-12-31 0000780571
us-gaap:NoncontrollingInterestMember 2017-12-31 0000780571
us-gaap:AccumulatedOtherComprehensiveIncomeMember 2018-12-31 0000780571
us-gaap:RetainedEarningsMember 2015-12-31 0000780571 us-gaap:CommonStockMember 2018-01-01 2018-12-31
0000780571 us-gaap: Accounting Standards Update 201609 Member
us-gaap:CommonStockIncludingAdditionalPaidInCapitalMember 2018-12-31 0000780571
us-gaap:NoncontrollingInterestMember 2017-01-01 2017-12-31 0000780571 us-gaap:ParentMember 2018-12-31
0000780571 us-gaap:RetainedEarningsMember 2018-12-31 0000780571 us-gaap:CommonStockMember 2017-01-01
2017-12-31 0000780571 us-gaap:CommonStockIncludingAdditionalPaidInCapitalMember 2015-12-31 0000780571
us-gaap:CommonStockIncludingAdditionalPaidInCapitalMember 2018-01-01 2018-12-31 0000780571
us-gaap:ParentMember 2017-12-31 0000780571 us-gaap:CommonStockIncludingAdditionalPaidInCapitalMember
2017-01-01 2017-12-31 0000780571 us-gaap:CommonStockMember 2017-12-31 0000780571 2016-12-31
0000780571 us-gaap:AccountingStandardsUpdate201609Member 2018-12-31 0000780571
us-gaap:AccountingStandardsUpdate201609Member us-gaap:ParentMember 2017-12-31 0000780571
us-gaap:CommonStockIncludingAdditionalPaidInCapitalMember 2017-12-31 0000780571
us-gaap:NoncontrollingInterestMember 2015-12-31 0000780571 us-gaap:NoncontrollingInterestMember 2018-01-01
2018-12-31 0000780571 us-gaap:RetainedEarningsMember 2016-01-01 2016-12-31 0000780571
us-gaap:CommonStockIncludingAdditionalPaidInCapitalMember 2016-01-01 2016-12-31 0000780571
us-gaap:RetainedEarningsMember 2018-01-01 2018-12-31 0000780571 us-gaap:ParentMember 2015-12-31
0000780571 us-gaap:AccountingStandardsUpdate201609Member us-gaap:RetainedEarningsMember 2017-12-31
0000780571 us-gaap:NoncontrollingInterestMember 2016-01-01 2016-12-31 0000780571
us-gaap:RetainedEarningsMember 2017-01-01 2017-12-31 0000780571 us-gaap:NoncontrollingInterestMember
2016-12-31 0000780571 us-gaap:CommonStockMember 2018-12-31 0000780571
us-gaap:CommonStockIncludingAdditionalPaidInCapitalMember 2018-12-31 0000780571
us-gaap:AccumulatedOtherComprehensiveIncomeMember 2015-12-31 0000780571
us-gaap: Accounting Standards Update 201609 Member 2017-12-31 0000780571
us-gaap:AccumulatedOtherComprehensiveIncomeMember 2016-12-31 0000780571
us-gaap:AccumulatedOtherComprehensiveIncomeMember 2016-01-01 2016-12-31 0000780571
itri:SIIverSpringNetworksInc.Member 2018-01-01 2018-12-31 0000780571
us-gaap:AccumulatedOtherComprehensiveIncomeMember 2017-01-01 2017-12-31 0000780571
itri:SIlverSpringNetworksInc.Member us-gaap:ParentMember 2018-01-01 2018-12-31 0000780571
us-gaap:AccountingStandardsUpdate201609Member us-gaap:RetainedEarningsMember 2016-12-31 0000780571
```

us-gaap:RetainedEarningsMember 2017-12-31 0000780571

us-gaap:AccumulatedOtherComprehensiveIncomeMember 2018-01-01 2018-12-31 0000780571

```
us-gaap:RetainedEarningsMember 2016-12-31 0000780571 itri:SIlverSpringNetworksInc.Member
us-gaap:CommonStockIncludingAdditionalPaidInCapitalMember 2018-01-01 2018-12-31 0000780571
us-gaap:NoncontrollingInterestMember 2018-12-31 0000780571 us-gaap:CommonStockMember 2016-12-31
0000780571 us-gaap:AccountingStandardsUpdate201609Member us-gaap:ParentMember 2018-12-31 0000780571
us-gaap:EmployeeStockMember 2018-12-31 0000780571 srt:MaximumMember 2018-01-01 2018-12-31 0000780571
srt:MaximumMember itri:MachineryAndEquipmentComputersAndSoftwareAndFurnitureMember 2018-01-01
2018-12-31 0000780571 us-gaap:EmployeeStockMember 2018-01-01 2018-12-31 0000780571 srt:MaximumMember
2018-12-31 0000780571 srt:MinimumMember 2018-01-01 2018-12-31 0000780571
us-gaap:PhantomShareUnitsPSUsMember 2018-01-01 2018-12-31 0000780571
us-gaap:EmployeeStockOptionMember 2018-01-01 2018-12-31 0000780571
us-gaap:RestrictedStockUnitsRSUMember 2018-01-01 2018-12-31 0000780571 2017-12-22 0000780571
us-gaap:BuildingAndBuildingImprovementsMember 2018-01-01 2018-12-31 0000780571
us-gaap:AccountingStandardsUpdate201409Member 2017-12-31 0000780571 us-gaap:SeniorNotesMember
2018-12-31 0000780571 srt:MinimumMember
itri:MachineryAndEquipmentComputersAndSoftwareAndFurnitureMember 2018-01-01 2018-12-31 0000780571
srt:MinimumMember us-gaap:AccountingStandardsUpdate201602Member 2018-12-31 0000780571
us-gaap:AccountingStandardsUpdate201616Member 2017-12-31 0000780571 srt:MaximumMember
us-gaap:AccountingStandardsUpdate201602Member 2018-12-31 0000780571 2018-01-05 0000780571
us-gaap:DevelopedTechnologyRightsMember 2018-12-31 0000780571
us-gaap:InProcessResearchAndDevelopmentMember 2018-12-31 0000780571
us-gaap:OtherIntangibleAssetsMember 2018-12-31 0000780571 us-gaap:OtherIntangibleAssetsMember 2017-12-31
0000780571 us-gaap:TrademarksAndTradeNamesMember 2017-12-31 0000780571
us-gaap:TrademarksAndTradeNamesMember 2018-12-31 0000780571 us-gaap:DevelopedTechnologyRightsMember
2017-12-31 0000780571 us-gaap:CustomerRelationshipsMember 2018-12-31 0000780571
us-gaap:InProcessResearchAndDevelopmentMember 2017-12-31 0000780571
us-gaap:CustomerRelationshipsMember 2017-12-31 0000780571 2018-10-01 2018-12-31 0000780571
itri:NetworkedSolutionsSegmentMember 2018-01-01 2018-12-31 0000780571 itri:OutcomesSegmentMember
2018-12-31 0000780571 itri:DeviceSolutionsMember 2018-09-30 0000780571 itri:DeviceSolutionsMember
2018-12-31 0000780571 itri:OutcomesSegmentMember 2018-09-30 0000780571
itri:NetworkedSolutionsSegmentMember 2018-10-01 2018-12-31 0000780571 itri:DeviceSolutionsMember
2018-01-01 2018-12-31 0000780571 itri:NetworkedSolutionsSegmentMember 2018-09-30 0000780571 2018-09-30
0000780571 itri:OutcomesSegmentMember 2018-01-01 2018-12-31 0000780571 itri:OutcomesSegmentMember
2018-10-01 2018-12-31 0000780571 itri:NetworkedSolutionsSegmentMember 2018-12-31 0000780571
itri:DeviceSolutionsMember 2018-10-01 2018-12-31 0000780571 itri:UsdDenominatedTermLoanMember
2017-01-01 2017-12-31 0000780571 us-gaap:SecuredDebtMember 2018-01-01 2018-12-31 0000780571
us-gaap:LineOfCreditMember 2017-01-01 2017-12-31 0000780571 us-gaap:LineOfCreditMember 2016-01-01
2016-12-31 0000780571 us-gaap:SecuredDebtMember 2016-01-01 2016-12-31 0000780571
us-gaap:SecuredDebtMember 2017-01-01 2017-12-31 0000780571 itri:UsdDenominatedTermLoanMember
2016-01-01 2016-12-31 0000780571 us-gaap:LineOfCreditMember 2018-01-01 2018-12-31 0000780571
itri:UsdDenominatedTermLoanMember 2018-01-01 2018-12-31 0000780571 2018-01-19 0000780571
itri:CreditFacilityMember 2018-12-31 0000780571 itri:UsdDenominatedTermLoanMember 2018-01-05 0000780571
us-gaap:DebtInstrumentRedemptionPeriodTwoMember us-gaap:ScenarioForecastMember 2022-01-15 2023-01-14
0000780571 us-gaap:RevolvingCreditFacilityMember 2018-01-05 0000780571
us-gaap:LondonInterbankOfferedRateLIBORMember 2018-01-01 2018-12-31 0000780571
us-gaap:DebtInstrumentRedemptionPeriodOneMember us-gaap:ScenarioForecastMember 2021-01-15 2022-01-14
0000780571 itri:AlternateBaseRate1Member 2018-01-01 2018-12-31 0000780571 us-gaap:LineOfCreditMember
2018-12-31 0000780571 us-gaap:LondonInterbankOfferedRateLIBORMember 2018-12-31 0000780571
us-gaap:DebtInstrumentRedemptionPeriodFourMember us-gaap:ScenarioForecastMember 2017-12-22 2021-01-14
0000780571 srt:MaximumMember us-gaap:ScenarioForecastMember 2017-12-22 2021-01-14 0000780571
2015-06-23 0000780571 itri:EURIBORMember 2018-01-01 2018-12-31 0000780571
us-gaap:StandbyLettersOfCreditMember 2018-12-31 0000780571 itri:AlternateBaseRate3Member 2018-01-01
```

```
2018-12-31 0000780571 itri:AlternateBaseRate2Member 2018-01-01 2018-12-31 0000780571
us-gaap:LondonInterbankOfferedRateLIBORMember 2018-01-01 2018-12-31 0000780571
us-gaap:FederalFundsEffectiveSwapRateMember 2018-01-01 2018-12-31 0000780571 srt:MinimumMember
us-gaap:ScenarioForecastMember 2017-12-22 2021-01-14 0000780571
us-gaap:DebtInstrumentRedemptionPeriodThreeMember us-gaap:ScenarioForecastMember 2023-01-15 2026-01-15
0000780571 us-gaap:SecuredDebtMember 2017-12-31 0000780571 itri:UsdDenominatedTermLoanMember
2018-12-31 0000780571 us-gaap:SecuredDebtMember 2018-12-31 0000780571 us-gaap:SeniorNotesMember
2017-12-31 0000780571 itri:UsdDenominatedTermLoanMember 2017-12-31 0000780571
us-gaap:LineOfCreditMember 2017-12-31 0000780571 us-gaap:RevolvingCreditFacilityMember 2018-12-31
0000780571 us-gaap:InterestRateCapMember 2016-01-01 2016-12-31 0000780571 us-gaap:InterestRateCapMember
2018-12-31 0000780571 2018-04-30 0000780571
itri:AccumulatedOtherComprehensiveIncomeNetUnrealizedGainLossOnNonderivativeInstrumentsMember
2018-12-31 0000780571 srt:MinimumMember us-gaap:ForeignExchangeContractMember
us-gaap:NondesignatedMember 2018-12-31 0000780571 us-gaap:CurrencySwapMember 2018-04-30 0000780571
us-gaap:InterestRateSwapMember 2018-12-31 0000780571 itri:A2018ProjectsMember 2018-01-01 2018-12-31
0000780571 itri:A2016ProjectsMember 2018-01-01 2018-12-31 0000780571 itri:NumberOfCounterpartiesMember
2017-01-01 2017-12-31 0000780571 us-gaap:InterestRateCapMember 2018-09-30 0000780571
us-gaap:InterestRateCapMember 2016-12-31 0000780571 srt:MaximumMember
us-gaap:ForeignExchangeContractMember us-gaap:NondesignatedMember 2018-12-31 0000780571
us-gaap:LondonInterbankOfferedRateLIBORMember us-gaap:SecuredDebtMember 2018-12-31 0000780571
us-gaap:ForwardContractsMember 2018-12-31 0000780571 itri:NumberOfCounterpartiesMember 2018-01-01
2018-12-31 0000780571 us-gaap:InterestRateSwapMember 2016-12-31 0000780571
itri:AccumulatedNetGainLossfromDerivativeandNonderivativeInstrumentsDesignatedasHedgingInstrumentsMember
2017-12-31 0000780571
itri: Accumulated Net Gain Loss from Derivative and Nonderivative Instruments Designated as Hedging Instruments Member and Nonderivative Instruments Designated as Hedging Instruments Member and Nonderivative Instruments Designated as Hedging 
2015-12-31 0000780571
itri:AccumulatedNetGainLossfromDerivativeandNonderivativeInstrumentsDesignatedasHedgingInstrumentsMember
2018-12-31 0000780571
itri:AccumulatedNetGainLossfromDerivativeandNonderivativeInstrumentsDesignatedasHedgingInstrumentsMember
2016-12-31 0000780571 us-gaap:InterestRateCapMember us-gaap:InterestExpenseMember 2016-01-01 2016-12-31
0000780571 itri:OtherIncomeExpenseMember 2016-01-01 2016-12-31 0000780571 us-gaap:InterestRateCapMember
us-gaap:InterestExpenseMember 2018-01-01 2018-12-31 0000780571 itri:OtherIncomeExpenseMember 2017-01-01
2017-12-31 0000780571 itri:OtherIncomeExpenseMember 2018-01-01 2018-12-31 0000780571
us-gaap:InterestRateCapMember us-gaap:InterestExpenseMember 2017-01-01 2017-12-31 0000780571
us-gaap:InterestRateCapMember 2017-01-01 2017-12-31 0000780571 itri:CurrencySwap1Member 2018-01-01
2018-12-31 0000780571 us-gaap:InterestRateSwapMember us-gaap:InterestExpenseMember 2018-01-01 2018-12-31
0000780571 itri:CurrencySwap2Member 2017-01-01 2017-12-31 0000780571 us-gaap:CurrencySwapMember
us-gaap:InterestExpenseMember 2016-01-01 2016-12-31 0000780571 us-gaap:InterestRateSwapMember 2018-01-01
2018-12-31 0000780571 us-gaap:CurrencySwapMember us-gaap:InterestExpenseMember 2018-01-01 2018-12-31
0000780571 us-gaap:CurrencySwapMember itri:OtherIncomeExpenseMember 2017-01-01 2017-12-31 0000780571
us-gaap:InterestRateSwapMember 2016-01-01 2016-12-31 0000780571 itri:CurrencySwap2Member 2018-01-01
2018-12-31 0000780571 itri:CurrencySwap1Member 2016-01-01 2016-12-31 0000780571
us-gaap:InterestRateCapMember 2018-01-01 2018-12-31 0000780571 us-gaap:InterestRateSwapMember 2017-01-01
2017-12-31 0000780571 itri:CurrencySwap2Member 2016-01-01 2016-12-31 0000780571
us-gaap:CurrencySwapMember itri:OtherIncomeExpenseMember 2018-01-01 2018-12-31 0000780571
us-gaap:CurrencySwapMember us-gaap:InterestExpenseMember 2017-01-01 2017-12-31 0000780571
us-gaap:CurrencySwapMember itri:OtherIncomeExpenseMember 2016-01-01 2016-12-31 0000780571
itri:CurrencySwap1Member 2017-01-01 2017-12-31 0000780571 us-gaap:InterestRateSwapMember
us-gaap:InterestExpenseMember 2017-01-01 2017-12-31 0000780571 us-gaap:InterestRateSwapMember
us-gaap:InterestExpenseMember 2016-01-01 2016-12-31 0000780571 us-gaap:OtherNoncurrentAssetsMember
us-gaap:InterestRateSwapMember us-gaap:DesignatedAsHedgingInstrumentMember 2018-12-31 0000780571
```

```
us-gaap:OtherNoncurrentAssetsMember us-gaap:InterestRateSwapMember
us-gaap:DesignatedAsHedgingInstrumentMember 2017-12-31 0000780571 us-gaap:OtherCurrentAssetsMember
us-gaap:InterestRateCapMember us-gaap:NondesignatedMember 2018-12-31 0000780571
us-gaap:OtherNoncurrentAssetsMember us-gaap:InterestRateCapMember
us-gaap:DesignatedAsHedgingInstrumentMember 2017-12-31 0000780571 us-gaap:OtherCurrentAssetsMember
us-gaap:NondesignatedMember 2018-12-31 0000780571 us-gaap:OtherNoncurrentAssetsMember
us-gaap:CurrencySwapMember us-gaap:DesignatedAsHedgingInstrumentMember 2017-12-31 0000780571
us-gaap:OtherCurrentLiabilitiesMember us-gaap:NondesignatedMember 2017-12-31 0000780571
us-gaap:OtherCurrentAssetsMember us-gaap:NondesignatedMember 2017-12-31 0000780571
us-gaap:OtherCurrentLiabilitiesMember us-gaap:NondesignatedMember 2018-12-31 0000780571
us-gaap:OtherCurrentAssetsMember us-gaap:CurrencySwapMember
us-gaap:DesignatedAsHedgingInstrumentMember 2018-12-31 0000780571 us-gaap:OtherNoncurrentAssetsMember
us-gaap:InterestRateCapMember us-gaap:NondesignatedMember 2018-12-31 0000780571
us-gaap:OtherCurrentAssetsMember us-gaap:InterestRateCapMember
us-gaap:DesignatedAsHedgingInstrumentMember 2018-12-31 0000780571 us-gaap:OtherCurrentAssetsMember
us-gaap:InterestRateSwapMember us-gaap:DesignatedAsHedgingInstrumentMember 2017-12-31 0000780571
us-gaap:OtherCurrentAssetsMember us-gaap:InterestRateSwapMember
us-gaap:DesignatedAsHedgingInstrumentMember 2018-12-31 0000780571 us-gaap:OtherCurrentAssetsMember
us-gaap:CurrencySwapMember us-gaap:DesignatedAsHedgingInstrumentMember 2017-12-31 0000780571
us-gaap:OtherCurrentAssetsMember us-gaap:InterestRateCapMember us-gaap:NondesignatedMember 2017-12-31
0000780571 us-gaap:OtherNoncurrentAssetsMember us-gaap:InterestRateCapMember
us-gaap:NondesignatedMember 2017-12-31 0000780571 us-gaap:OtherNoncurrentAssetsMember
us-gaap:InterestRateCapMember us-gaap:DesignatedAsHedgingInstrumentMember 2018-12-31 0000780571
us-gaap:OtherNoncurrentAssetsMember us-gaap:CurrencySwapMember
us-gaap:DesignatedAsHedgingInstrumentMember 2018-12-31 0000780571 us-gaap:OtherCurrentAssetsMember
us-gaap:InterestRateCapMember us-gaap:DesignatedAsHedgingInstrumentMember 2017-12-31 0000780571
us-gaap:GuaranteedInsuranceContractTypeOfBenefitDomain us-gaap:FairValueInputsLevel3Member 2017-12-31
0000780571 us-gaap:FairValueInputsLevel3Member 2018-12-31 0000780571
us-gaap:CashAndCashEquivalentsMember us-gaap:FairValueInputsLevel3Member 2017-12-31 0000780571
us-gaap:CashAndCashEquivalentsMember us-gaap:FairValueInputsLevel3Member 2018-12-31 0000780571
us-gaap:SecuritiesAssetsMember us-gaap:FairValueInputsLevel1Member 2017-12-31 0000780571
us-gaap:SecuritiesAssetsMember us-gaap:FairValueInputsLevel3Member 2018-12-31 0000780571
us-gaap:GuaranteedInsuranceContractTypeOfBenefitDomain us-gaap:FairValueInputsLevel1Member 2018-12-31
0000780571 us-gaap:FairValueInputsLevel1Member 2017-12-31 0000780571
us-gaap:FairValueInputsLevel1Member 2018-12-31 0000780571 us-gaap:SecuritiesAssetsMember 2018-12-31
0000780571 us-gaap:SecuritiesAssetsMember us-gaap:FairValueInputsLevel1Member 2018-12-31 0000780571
us-gaap:GuaranteedInsuranceContractTypeOfBenefitDomain us-gaap:FairValueInputsLevel3Member 2018-12-31
0000780571 us-gaap:SecuritiesAssetsMember 2017-12-31 0000780571
us-gaap:GuaranteedInsuranceContractTypeOfBenefitDomain us-gaap:FairValueInputsLevel1Member 2017-12-31
0000780571 us-gaap:CashAndCashEquivalentsMember 2018-12-31 0000780571
us-gaap:FairValueInputsLevel3Member 2017-12-31 0000780571
us-gaap:GuaranteedInsuranceContractTypeOfBenefitDomain 2018-12-31 0000780571
us-gaap:SecuritiesAssetsMember us-gaap:FairValueInputsLevel3Member 2017-12-31 0000780571
us-gaap:CashAndCashEquivalentsMember us-gaap:FairValueInputsLevel1Member 2018-12-31 0000780571
us-gaap:GuaranteedInsuranceContractTypeOfBenefitDomain 2017-12-31 0000780571
us-gaap:CashAndCashEquivalentsMember 2017-12-31 0000780571 us-gaap:CashAndCashEquivalentsMember
us-gaap:FairValueInputsLevel1Member 2017-12-31 0000780571 us-gaap:FairValueInputsLevel3Member 2016-12-31
0000780571 us-gaap:GuaranteedInsuranceContractTypeOfBenefitDomain us-gaap:FairValueInputsLevel3Member
2017-01-01 2017-12-31 0000780571 us-gaap:SecuritiesAssetsMember us-gaap:FairValueInputsLevel3Member
2017-01-01 2017-12-31 0000780571 us-gaap:FairValueInputsLevel3Member 2017-01-01 2017-12-31 0000780571
```

us-gaap:GuaranteedInsuranceContractTypeOfBenefitDomain us-gaap:FairValueInputsLevel3Member 2016-12-31

```
0000780571 us-gaap:SecuritiesAssetsMember us-gaap:FairValueInputsLevel3Member 2016-12-31 0000780571
us-gaap:SecuritiesAssetsMember us-gaap:FairValueInputsLevel3Member 2018-01-01 2018-12-31 0000780571
us-gaap:GuaranteedInsuranceContractTypeOfBenefitDomain us-gaap:FairValueInputsLevel3Member 2018-01-01
2018-12-31 0000780571 us-gaap:FairValueInputsLevel3Member 2018-01-01 2018-12-31 0000780571
itri:LongerDurationEuroDenominatedDefinedBenefitPlansMember 2018-12-31 0000780571
itri:PercentageOfBenefitPlansDenominatedInEuroDomain 2018-01-01 2018-12-31 0000780571
itri:ShorterDurationEuroDenominatedDefinedBenefitPlansMember 2018-12-31 0000780571
itri:StockIncentivePlanMember 2018-12-31 0000780571 us-gaap:PhantomShareUnitsPSUsMember 2018-12-31
0000780571 us-gaap:PhantomShareUnitsPSUsMember 2017-12-31 0000780571
us-gaap:EmployeeStockOptionMember 2018-12-31 0000780571 itri:SSNIPlanMember 2018-12-31 0000780571
us-gaap:RestrictedStockUnitsRSUMember 2018-12-31 0000780571 us-gaap:EmployeeStockOptionMember
2017-01-01 2017-12-31 0000780571 us-gaap:EmployeeStockOptionMember 2016-01-01 2016-12-31 0000780571
us-gaap:EmployeeStockOptionMember 2015-12-31 0000780571 us-gaap:EmployeeStockOptionMember 2017-12-31
0000780571 us-gaap:EmployeeStockOptionMember itri:ExpectedToVestMember 2018-01-01 2018-12-31
0000780571 us-gaap:EmployeeStockOptionMember itri:ExpectedToVestMember 2018-12-31 0000780571
us-gaap:EmployeeStockOptionMember 2016-12-31 0000780571 us-gaap:EmployeeStockOptionMember 2014-01-01
2014-12-31 0000780571 us-gaap:PhantomShareUnitsPSUsMember 2017-01-01 2017-12-31 0000780571
us-gaap:PhantomShareUnitsPSUsMember itri:ExpectedToVestMember 2018-12-31 0000780571
us-gaap:PhantomShareUnitsPSUsMember itri:ExpectedToVestMember 2017-12-31 0000780571
us-gaap:PhantomShareUnitsPSUsMember 2016-12-31 0000780571 us-gaap:RestrictedStockUnitsRSUMember
itri:LongTermPerformanceRestrictedStockAwardMember 2017-01-01 2017-12-31 0000780571
us-gaap:RestrictedStockUnitsRSUMember itri:LongTermPerformanceRestrictedStockAwardMember 2016-01-01
2016-12-31 0000780571 us-gaap:RestrictedStockUnitsRSUMember
itri:LongTermPerformanceRestrictedStockAwardMember 2018-01-01 2018-12-31 0000780571
us-gaap:RestrictedStockUnitsRSUMember itri:VestedAndReleasedMember 2017-01-01 2017-12-31 0000780571
us-gaap:RestrictedStockUnitsRSUMember itri:VestedAndReleasedMember 2016-01-01 2016-12-31 0000780571
us-gaap:RestrictedStockUnitsRSUMember 2016-01-01 2016-12-31 0000780571
us-gaap:RestrictedStockUnitsRSUMember 2015-12-31 0000780571 us-gaap:RestrictedStockUnitsRSUMember
itri:ExpectedToVestMember 2018-12-31 0000780571 us-gaap:RestrictedStockUnitsRSUMember 2016-12-31
0000780571 us-gaap:RestrictedStockUnitsRSUMember itri:VestedButNotReleasedMember 2018-01-01 2018-12-31
0000780571 us-gaap:RestrictedStockUnitsRSUMember itri:VestedAndReleasedMember 2018-01-01 2018-12-31
0000780571 us-gaap:RestrictedStockUnitsRSUMember 2017-01-01 2017-12-31 0000780571
us-gaap:RestrictedStockUnitsRSUMember 2017-12-31 0000780571
us-gaap: Valuation Allowance Of Deferred Tax Assets Member 2016-12-31 0000780571
us-gaap:ValuationAllowanceOfDeferredTaxAssetsMember 2017-01-01 2017-12-31 0000780571
us-gaap:ValuationAllowanceOfDeferredTaxAssetsMember 2018-01-01 2018-12-31 0000780571
us-gaap:ValuationAllowanceOfDeferredTaxAssetsMember 2018-12-31 0000780571
us-gaap:ValuationAllowanceOfDeferredTaxAssetsMember 2017-12-31 0000780571
us-gaap:ValuationAllowanceOfDeferredTaxAssetsMember 2016-01-01 2016-12-31 0000780571
us-gaap:ValuationAllowanceOfDeferredTaxAssetsMember 2015-12-31 0000780571 country:LU 2018-12-31
0000780571 country:US 2018-12-31 0000780571
itri:UndistributedEarningsofForeignSubsidiariesandForeignCorporateJointVenturesMember 2018-12-31 0000780571
itri:UndistributedEarningsofForeignSubsidiariesandForeignCorporateJointVenturesMember 2017-12-31 0000780571
itri:TaxCutsandJobsActDomain 2018-01-01 2018-12-31 0000780571 country:GB 2018-01-01 2018-12-31
0000780571 us-gaap:InternalRevenueServiceIRSMember 2018-01-01 2018-12-31 0000780571 country:DE
2018-01-01 2018-12-31 0000780571 country:FR 2018-01-01 2018-12-31 0000780571 country:BR 2018-01-01
2018-12-31 0000780571 country:IT 2018-01-01 2018-12-31 0000780571 us-gaap:SuretyBondMember 2017-12-31
0000780571 itri:CreditFacilityMember 2017-12-31 0000780571
itri:UnsecuredMulticurrencyRevolvingLinesOfCreditMember 2018-12-31 0000780571
itri:UnsecuredMulticurrencyRevolvingLinesOfCreditMember 2017-12-31 0000780571 us-gaap:SuretyBondMember
```

2018-12-31 0000780571 us-gaap:OtherRestructuringMember itri:A2018ProjectsMember 2017-01-01 2017-12-31

0000780571 us-gaap:EmployeeSeveranceMember itri:A2018ProjectsMember 2018-12-31 0000780571

```
us-gaap:OtherRestructuringMember itri:A2018ProjectsMember 2018-12-31 0000780571 itri:A2018ProjectsMember
2018-12-31 0000780571 itri:AssetImpairmentAndNetGainLossOnSaleOrDisposalMember itri:A2018ProjectsMember
2017-01-01 2017-12-31 0000780571 us-gaap:EmployeeSeveranceMember itri:A2018ProjectsMember 2018-01-01
2018-12-31 0000780571 itri:AssetImpairmentAndNetGainLossOnSaleOrDisposalMember itri:A2018ProjectsMember
2018-01-01 2018-12-31 0000780571 us-gaap:EmployeeSeveranceMember itri:A2018ProjectsMember 2017-01-01
2017-12-31 0000780571 itri:AssetImpairmentAndNetGainLossOnSaleOrDisposalMember itri:A2018ProjectsMember
2018-12-31 0000780571 itri:A2018ProjectsMember 2017-01-01 2017-12-31 0000780571
us-gaap:OtherRestructuringMember itri:A2018ProjectsMember 2018-01-01 2018-12-31 0000780571
itri:A2016ProjectsMember 2016-09-01 2017-12-31 0000780571 us-gaap:OtherRestructuringMember
itri:A2016ProjectsMember 2018-12-31 0000780571 itri:AssetImpairmentAndNetGainLossOnSaleOrDisposalMember
itri:A2016ProjectsMember 2018-12-31 0000780571 itri:AssetImpairmentAndNetGainLossOnSaleOrDisposalMember
itri:A2016ProjectsMember 2016-09-01 2017-12-31 0000780571 us-gaap:EmployeeSeveranceMember
itri:A2016ProjectsMember 2018-01-01 2018-12-31 0000780571 us-gaap:EmployeeSeveranceMember
itri:A2016ProjectsMember 2016-09-01 2017-12-31 0000780571 itri:A2016ProjectsMember 2018-12-31 0000780571
itri:AssetImpairmentAndNetGainLossOnSaleOrDisposalMember itri:A2016ProjectsMember 2018-01-01 2018-12-31
0000780571 us-gaap:EmployeeSeveranceMember itri:A2016ProjectsMember 2018-12-31 0000780571
us-gaap:OtherRestructuringMember itri:A2016ProjectsMember 2018-01-01 2018-12-31 0000780571
us-gaap:OtherRestructuringMember itri:A2016ProjectsMember 2016-09-01 2017-12-31 0000780571
us-gaap:EmployeeSeveranceMember 2018-12-31 0000780571 us-gaap:OtherRestructuringMember 2018-12-31
0000780571 us-gaap:OtherRestructuringMember 2017-12-31 0000780571
itri:AssetImpairmentAndNetGainLossOnSaleOrDisposalMember 2018-01-01 2018-12-31 0000780571
us-gaap:OtherRestructuringMember 2018-01-01 2018-12-31 0000780571 us-gaap:EmployeeSeveranceMember
2018-01-01 2018-12-31 0000780571 itri:AssetImpairmentAndNetGainLossOnSaleOrDisposalMember 2017-12-31
0000780571 itri:AssetImpairmentAndNetGainLossOnSaleOrDisposalMember 2018-12-31 0000780571
itri:SIlverSpringNetworksInc.Member 2018-01-05 2018-12-31 0000780571 us-gaap:EmployeeSeveranceMember
2017-12-31 0000780571 us-gaap: Accumulated Translation Adjustment Member 2016-01-01 2016-12-31 0000780571
us-gaap:AccumulatedNetGainLossFromDesignatedOrQualifyingCashFlowHedgesMember 2016-12-31 0000780571
us-gaap:AccumulatedNetGainLossFromDesignatedOrQualifyingCashFlowHedgesMember 2016-01-01 2016-12-31
0000780571 us-gaap:AccumulatedDefinedBenefitPlansAdjustmentMember 2017-01-01 2017-12-31 0000780571
us-gaap: Accumulated Translation Adjustment Member 2017-12-31 0000780571
us-gaap:AccumulatedTranslationAdjustmentMember 2017-01-01 2017-12-31 0000780571
us-gaap:AccumulatedNetGainLossFromDesignatedOrQualifyingCashFlowHedgesMember 2017-01-01 2017-12-31
0000780571
itri:AccumulatedOtherComprehensiveIncomeNetUnrealizedGainLossOnNonderivativeInstrumentsMember
2017-01-01 2017-12-31 0000780571
itri:AccumulatedOtherComprehensiveIncomeNetUnrealizedGainLossOnNonderivativeInstrumentsMember
2018-01-01 2018-12-31 0000780571 us-gaap:AccumulatedDefinedBenefitPlansAdjustmentMember 2018-01-01
2018-12-31 0000780571
itri:AccumulatedOtherComprehensiveIncomeNetUnrealizedGainLossOnNonderivativeInstrumentsMember
2017-12-31 0000780571 us-gaap: Accumulated Net Gain Loss From Designated Or Qualifying Cash Flow Hedges Member
2018-01-01 2018-12-31 0000780571 us-gaap:AccumulatedDefinedBenefitPlansAdjustmentMember 2016-01-01
2016-12-31 0000780571 us-gaap: Accumulated Translation Adjustment Member 2018-12-31 0000780571
us-gaap:AccumulatedNetGainLossFromDesignatedOrQualifyingCashFlowHedgesMember 2017-12-31 0000780571
itri:AccumulatedOtherComprehensiveIncomeNetUnrealizedGainLossOnNonderivativeInstrumentsMember
2016-12-31 0000780571 us-gaap: Accumulated Translation Adjustment Member 2018-01-01 2018-12-31 0000780571
us-gaap:AccumulatedNetGainLossFromDesignatedOrOualifyingCashFlowHedgesMember 2018-12-31 0000780571
itri:AccumulatedOtherComprehensiveIncomeNetUnrealizedGainLossOnNonderivativeInstrumentsMember
2016-01-01 2016-12-31 0000780571 us-gaap: Accumulated Translation Adjustment Member 2015-12-31 0000780571
us-gaap:AccumulatedDefinedBenefitPlansAdjustmentMember 2016-12-31 0000780571
us-gaap:AccumulatedTranslationAdjustmentMember 2016-12-31 0000780571
```

```
us-gaap:AccumulatedDefinedBenefitPlansAdjustmentMember 2018-12-31 0000780571
us-gaap:AccumulatedDefinedBenefitPlansAdjustmentMember 2017-12-31 0000780571
itri:AccumulatedOtherComprehensiveIncomeNetUnrealizedGainLossOnNonderivativeInstrumentsMember
2015-12-31 0000780571 us-gaap: Accumulated Defined Benefit Plans Adjustment Member 2015-12-31 0000780571
us-gaap:AccumulatedNetGainLossFromDesignatedOrQualifyingCashFlowHedgesMember 2015-12-31 0000780571
us-gaap:EstimateOfFairValueFairValueDisclosureMember 2018-12-31 0000780571
us-gaap:CarryingReportedAmountFairValueDisclosureMember 2017-12-31 0000780571
us-gaap:CarryingReportedAmountFairValueDisclosureMember 2018-12-31 0000780571
us-gaap:InterestRateCapMember us-gaap:CarryingReportedAmountFairValueDisclosureMember 2018-12-31
0000780571 us-gaap:EstimateOfFairValueFairValueDisclosureMember 2017-12-31 0000780571
us-gaap:InterestRateSwapMember us-gaap:CarryingReportedAmountFairValueDisclosureMember 2018-12-31
0000780571 us-gaap:EstimateOfFairValueFairValueDisclosureMember us-gaap:LineOfCreditMember 2018-12-31
0000780571 us-gaap:InterestRateSwapMember us-gaap:CarryingReportedAmountFairValueDisclosureMember
2017-12-31 0000780571 us-gaap:CurrencySwapMember
us-gaap:CarryingReportedAmountFairValueDisclosureMember 2017-12-31 0000780571
us-gaap:EstimateOfFairValueFairValueDisclosureMember us-gaap:LineOfCreditMember 2017-12-31 0000780571
us-gaap:CarryingReportedAmountFairValueDisclosureMember us-gaap:LineOfCreditMember 2018-12-31
0000780571 us-gaap:InterestRateSwapMember us-gaap:EstimateOfFairValueFairValueDisclosureMember
2018-12-31 0000780571 us-gaap:InterestRateCapMember us-gaap:EstimateOfFairValueFairValueDisclosureMember
2017-12-31 0000780571 us-gaap:CurrencySwapMember us-gaap:EstimateOfFairValueFairValueDisclosureMember
2018-12-31 0000780571 us-gaap:CarryingReportedAmountFairValueDisclosureMember
itri:UsdDenominatedTermLoanMember 2017-12-31 0000780571 us-gaap:InterestRateSwapMember
us-gaap:EstimateOfFairValueFairValueDisclosureMember 2017-12-31 0000780571 us-gaap:CurrencySwapMember
us-gaap:EstimateOfFairValueFairValueDisclosureMember 2017-12-31 0000780571
us-gaap:CarryingReportedAmountFairValueDisclosureMember us-gaap:LineOfCreditMember 2017-12-31
0000780571 us-gaap:InterestRateCapMember us-gaap:EstimateOfFairValueFairValueDisclosureMember 2018-12-31
0000780571 us-gaap:CarryingReportedAmountFairValueDisclosureMember itri:UsdDenominatedTermLoanMember
2018-12-31 0000780571 us-gaap:InterestRateCapMember
us-gaap:CarryingReportedAmountFairValueDisclosureMember 2017-12-31 0000780571
us-gaap:EstimateOfFairValueFairValueDisclosureMember itri:UsdDenominatedTermLoanMember 2018-12-31
0000780571 us-gaap:EstimateOfFairValueFairValueDisclosureMember itri:UsdDenominatedTermLoanMember
2017-12-31 0000780571 us-gaap:CurrencySwapMember
us-gaap:CarryingReportedAmountFairValueDisclosureMember 2018-12-31 0000780571 us-gaap:ProductMember
itri:OutcomesSegmentMember 2016-01-01 2016-12-31 0000780571 us-gaap:CorporateNonSegmentMember
2016-01-01 2016-12-31 0000780571 itri:OutcomesSegmentMember 2017-01-01 2017-12-31 0000780571
itri:DeviceSolutionsMember 2016-01-01 2016-12-31 0000780571 itri:NetworkedSolutionsSegmentMember
2017-01-01 2017-12-31 0000780571 itri:OutcomesSegmentMember 2016-01-01 2016-12-31 0000780571
us-gaap:ServiceMember itri:OutcomesSegmentMember 2017-01-01 2017-12-31 0000780571
us-gaap:ProductMember itri:OutcomesSegmentMember 2018-01-01 2018-12-31 0000780571
us-gaap:CorporateNonSegmentMember 2017-01-01 2017-12-31 0000780571 us-gaap:ProductMember
itri:DeviceSolutionsMember 2017-01-01 2017-12-31 0000780571 us-gaap:ProductMember
itri:DeviceSolutionsMember 2016-01-01 2016-12-31 0000780571 us-gaap;ServiceMember
itri:NetworkedSolutionsSegmentMember 2017-01-01 2017-12-31 0000780571 us-gaap:ServiceMember
itri:DeviceSolutionsMember 2018-01-01 2018-12-31 0000780571 itri:NetworkedSolutionsSegmentMember
2016-01-01 2016-12-31 0000780571 us-gaap:ServiceMember itri:DeviceSolutionsMember 2017-01-01 2017-12-31
0000780571 us-gaap:ProductMember itri:DeviceSolutionsMember 2018-01-01 2018-12-31 0000780571
us-gaap:ServiceMember itri:NetworkedSolutionsSegmentMember 2016-01-01 2016-12-31 0000780571
us-gaap:ServiceMember itri:NetworkedSolutionsSegmentMember 2018-01-01 2018-12-31 0000780571
itri:DeviceSolutionsMember 2017-01-01 2017-12-31 0000780571 us-gaap:ServiceMember
itri:DeviceSolutionsMember 2016-01-01 2016-12-31 0000780571 us-gaap:ProductMember
itri:NetworkedSolutionsSegmentMember 2018-01-01 2018-12-31 0000780571 us-gaap:ProductMember
```

itri:NetworkedSolutionsSegmentMember 2017-01-01 2017-12-31 0000780571 us-gaap:ProductMember itri:OutcomesSegmentMember 2017-01-01 2017-12-31 0000780571 us-gaap:ProductMember itri:NetworkedSolutionsSegmentMember 2016-01-01 2016-12-31 0000780571 us-gaap:ServiceMember itri:OutcomesSegmentMember 2018-01-01 2018-12-31 0000780571 us-gaap:ServiceMember itri:OutcomesSegmentMember 2016-01-01 2016-12-31 0000780571 us-gaap:CorporateNonSegmentMember 2018-01-01 2018-12-31 0000780571 us-gaap:EMEAMember 2016-01-01 2016-12-31 0000780571 us-gaap:EMEAMember 2018-01-01 2018-12-31 0000780571 itri:OtherCountriesMember 2016-01-01 2016-12-31 0000780571 itri:UnitedStatesAndCanadaMember 2017-01-01 2017-12-31 0000780571 itri:OtherCountriesMember 2017-01-01 2017-12-31 0000780571 itri:OtherCountriesMember 2018-01-01 2018-12-31 0000780571 itri:UnitedStatesAndCanadaMember 2016-01-01 2016-12-31 0000780571 us-gaap:EMEAMember 2017-01-01 2017-12-31 0000780571 itri:UnitedStatesAndCanadaMember 2018-01-01 2018-12-31 0000780571 country:US 2018-12-31 0000780571 itri:OutsideUnitedStatesMember 2017-12-31 0000780571 country:US 2017-12-31 0000780571 itri:OutsideUnitedStatesMember 2018-12-31 0000780571 2018-01-01 2018-09-30 0000780571 itri:WaterOperatingSegmentMember itri:InsuranceRecoverynetoftaxMember 2017-01-01 2017-12-31 0000780571 itri:ThresholdforReportingCustomerConcentrationMember us-gaap:SalesMember 2018-01-01 2018-12-31 0000780571 itri:ThresholdforReportingCustomerConcentrationMember us-gaap:SalesMember 2016-01-01 2016-12-31 0000780571 itri:ThresholdforReportingCustomerConcentrationMember us-gaap:SalesMember 2017-01-01 2017-12-31 0000780571 us-gaap:TrademarksAndTradeNamesMember 2018-01-01 2018-12-31 0000780571 itri:CoreDevelopedTechnologyMember 2018-01-05 0000780571 2018-01-05 2018-01-05 0000780571 us-gaap:InProcessResearchAndDevelopmentMember 2018-01-05 0000780571 us-gaap:TrademarksAndTradeNamesMember 2018-01-05 0000780571 itri:CoreDevelopedTechnologyMember 2018-01-01 2018-12-31 0000780571 itri:CustomerContractsAndRelationshipsMember 2018-01-05 0000780571 itri:SIlverSpringNetworksInc.Member 2018-01-05 0000780571 itri:CustomerContractsAndRelationshipsMember 2018-01-01 2018-12-31 0000780571 itri:SIlverSpringNetworksInc.Member 2018-10-01 2018-12-31 0000780571 itri:SIlverSpringNetworksInc.Member 2017-01-01 2017-12-31 0000780571 us-gaap:AccountingStandardsUpdate201409Member us-gaap:DifferenceBetweenRevenueGuidanceInEffectBeforeAndAfterTopic606Member 2018-12-31 0000780571 2020-01-01 2018-12-31 0000780571 2019-01-01 2018-12-31 0000780571 us-gaap: Accounting Standards Update 201409 Member us-gaap:DifferenceBetweenRevenueGuidanceInEffectBeforeAndAfterTopic606Member 2018-01-01 2018-12-31 0000780571 us-gaap:AccountingStandardsUpdate201409Member us-gaap:DifferenceBetweenRevenueGuidanceInEffectBeforeAndAfterTopic606Member 2017-12-31 0000780571 $2018-07-01\ 2018-09-30\ 0000780571\ 2017-04-01\ 2017-06-30\ 0000780571\ 2018-01-01\ 2018-03-31\ 0000780571$ 2017-07-01 2017-09-30 0000780571 2017-10-01 2017-12-31 0000780571 2017-01-01 2017-03-31 0000780571

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF $^{\rm X}$ 1934

2018-04-01 2018-06-30 xbrli:shares iso4217:USD xbrli:shares iso4217:USD xbrli:pure itri:contracts itri:counterparty

For the fiscal year ended December 31, 2018 OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE OACT OF 1934

For the transition period from to Commission file number 000-22418

ITRON, INC.

(Exact name of registrant as specified in its charter)

Washington 91-1011792

 $(State\ of\ Incorporation)\ \ (I.R.S.\ Employer\ Identification\ Number)$

2111 N Molter Road, Liberty Lake, Washington 99019

(509) 924-9900

(Address and telephone number of registrant's principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class Name of each exchange on which registered

Common stock, no par value NASDAQ Global Select Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes "No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes $\,^{''}$ No $\,^{''}$

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No "

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No "

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer x Accelerated filer ...

Non-accelerated filer $\,\,$ o $\,$ (Do not check if a smaller reporting company) $\,\,$ Smaller reporting company $\,$

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes "No x

As of June 30, 2018 (the last business day of the registrant's most recently completed second fiscal quarter), the aggregate market value of the shares of common stock held by non-affiliates of the registrant (based on the closing price for the common stock on the NASDAQ Global Select Market) was \$2,336,765,884.

As of January 31, 2019, there were outstanding 39,535,326 shares of the registrant's common stock, no par value, which is the only class of common stock of the registrant.

DOCUMENTS INCORPORATED BY REFERENCE

The information called for by Part III is incorporated by reference to the definitive Proxy Statement for the Annual Meeting of Shareholders of the Company to be held on May 9, 2019.

Itron, Inc.

Table of Contents

	Page
PART I	
ITEM 1: <u>BUSINESS</u>	<u>1</u>
ITEM 1A: RISK FACTORS	<u>7</u>
ITEM 1B: <u>UNRESOLVED STAFF COMMENTS</u>	<u>17</u>
ITEM 2: PROPERTIES	<u>18</u>
ITEM 3: <u>LEGAL PROCEEDINGS</u>	<u>18</u>
ITEM 4: MINE SAFETY DISCLOSURES	<u>18</u>
PART II	
ITEM 5: MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS	19
AND ISSUER PURCHASES OF EQUITY SECURITIES	17
ITEM 6: <u>SELECTED CONSOLIDATED FINANCIAL DATA</u>	<u>21</u>
ITEM 7: MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND	<u>22</u>
RESULTS OF OPERATIONS	
ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	<u>42</u>
ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	<u>45</u>
Consolidated Statements of Operations	<u>46</u>
Consolidated Statements of Comprehensive Income (Loss) Consolidated Balance Sheets	<u>47</u> <u>48</u>
Consolidated Statements of Equity	49
Consolidated Statements of Cash Flows	<u>50</u>
Notes to Consolidated Financial Statements	<u>50</u>
CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND	
ITEM 9: FINANCIAL DISCLOSURE	<u>97</u>
ITEM 9A: CONTROLS AND PROCEDURES	<u>97</u>
ITEM 9B: OTHER INFORMATION	<u>100</u>
PART III	
ITEM 10: <u>DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE</u>	<u>101</u>
ITEM 11: EXECUTIVE COMPENSATION	<u>101</u>
ITEM 12: SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND	<u>101</u>
RELATED STOCKHOLDER MATTERS	
ITEM 13: CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR	<u>101</u>
ITEM 13. INDEPENDENCE ITEM 14: PRINCIPAL ACCOUNTING FEES AND SERVICES	102
THEM 14. FRINCIPAL ACCOUNTING FEES AND SERVICES	102
PART IV	
ITEM 15: EXHIBITS, FINANCIAL STATEMENT SCHEDULE	<u>103</u>
<u>SIGNATURES</u>	<u>107</u>

Table of Contents

In this Annual Report on Form 10-K, the terms "we," "us," "our," "Itron," and the "Company" refer to Itron, Inc. **Certain Forward-Looking Statements**

This document contains forward-looking statements concerning our operations, financial performance, revenues, earnings growth, liquidity, and other items. This document reflects our current plans and expectations and is based on information currently available as of the date of this Annual Report on Form 10-K. When we use the words "expect," "intend," "anticipate," "believe," "plan," "project," "estimate," "future," "objective," "may," "will," "will continue," and similar expressions, they are intended to identify forward-looking statements. Forward-looking statements rely on a number of assumptions and estimates. These assumptions and estimates could be inaccurate and cause our actual results to vary materially from expected results. You should not solely rely on these forward-looking statements as they are only valid as of the date of this Annual Report on Form 10-K. We do not have any obligation to publicly update or revise any forward-looking statement in this document. For a complete description of risks and uncertainties, refer to Item 1A: "Risk Factors" included in this Annual Report on Form 10-K.

PART I ITEM 1: BUSINESS Available Information

Documents we provide to the Securities and Exchange Commission (SEC) are available free of charge under the Investors section of our website at *www.itron.com* as soon as practicable after they are filed with or furnished to the SEC. In addition, these documents are available at the SEC's website (*http://www.sec.gov*) and at the SEC's Headquarters at 100 F Street, NE, Washington, DC 20549, or by calling 1-800-SEC-0330.

General

Itron enables utilities and cities to safely, securely and reliably deliver critical infrastructure services to communities in more than 100 countries. Our proven portfolio of smart networks, software, services, devices, and sensors helps our customers better manage their operations in the energy, water, and smart city space. We are among the leading technology and services companies offering end-to-end device solutions, networked solutions, and outcomes-based products and services. Our comprehensive offerings measure, manage, and provide data analytics and services to utilities and municipalities that enable them to responsibly and efficiently manage resources.

We have over 40 years of experience in supporting utilities and municipalities in the management of their data and critical infrastructure needs. Incorporated in 1977 with a focus on meter reading technology, we entered the electricity meter manufacturing business with the acquisition of Schlumberger Electricity Metering in 2004. In 2007, we expanded our presence in global meter manufacturing and systems with the acquisition of Actaris Metering Systems SA. In 2017, we completed our acquisition of Comverge by purchasing the stock of its parent, Peak Holding Corp. (Comverge), which enabled us to offer integrated cloud-based demand response, energy efficiency, and customer engagement solutions. In 2018, we strengthened our ability to deliver a broader set of solutions and to increase the pace of growth and innovation in the utility, smart city, and Industrial Internet of Things markets with the acquisition of Silver Spring Networks, Inc. (SSNI).

The following is a discussion of our major products, our markets, and our operating segments. Refer to Item 7: "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Item 8: "Financial Statements and Supplementary Data" for specific segment results.

Our Business

We are a technology and service company, who is a leader in the Industrial Internet of Things, offering solutions that enable utilities and municipalities to safely, securely and reliably operate their critical infrastructure. Our solutions include the deployment of smart networks, software, services, devices, sensors, and data analytics that allow our customers to manage assets, secure revenue, lower operational costs, improve customer service, improve safety, and

enable efficient management of valuable resources. Our comprehensive solutions and data analytics address the unique challenges facing the energy, water, and municipality sectors, including increasing demand on resources, non-technical loss, leak detection, environmental and regulatory compliance, and improved operational reliability.

We offer a portfolio of products, software, and services to our customers that can be a standalone, one-time purchase or an end-to-end solution that can be reoccurring over multiple years. The portfolio includes hardware products used for measurement, control, or sensing with and without communications capability; a combination of endpoints and network infrastructure designed

1

Table of Contents

and sold as a complete solutions for the purpose of robustly acquiring and transporting application specific data; value added services, software, and products that organize, analyze and interpret data for the purpose of gaining insights, making decisions, and informing actions. We offer managed services, software-as-a-service (SaaS), technical support services, licensing hardware technology, and consulting services.

Industry Drivers

Utility and municipalities are in the middle of an evolution of how they operate critical infrastructure, manage scarce resources, and interact with their customers. Efficiently managing resources within energy, water, and cities is a top priority globally, as increasing populations and resource consumption continues to stress an aging infrastructure. The growing demand for energy, water, and municipal services coupled with the proliferation of renewable energy sources, smart communicating devices, sensors, and multiple data producing technologies is forcing providers to rethink how they operate and service their communities. This evolution comes at a time when utilities and municipalities are challenged by cost constraints, regulatory requirements, environmental concerns, safety, and resource scarcity. Itron provides its customers with a solution-based offering to safely, securely, and reliably optimize their critical infrastructure to improve the efficiency of their services and to better understand their customers with near real-time knowledge of their resource usage. An added benefit of our solutions is the utility or municipality can empower their customers to understand and have control over their resource usage, allowing for better management and conservation of valuable resources.

Our Operating Segments

We operate under the Itron brand worldwide and manage and report under three operating segments. Effective October 1, 2018, we reorganized our operational reporting segmentation from Electricity, Gas, Water, and Networks to Device Solutions, Networked Solutions, and Outcomes. As part of our reorganization, we actively integrated recent acquisitions and implementing an organizational structure that aligns with the new segments. In conjunction with the rollout of our new operating segments, we unified our go-to-market strategy with a single, global sales force, which sells the full portfolio of Itron solutions, products, and services. We manage our product development, service delivery, and manufacturing operations on a worldwide basis to promote global, integrated oversight of our operations and to ensure consistency and interoperability between our operating segments. The reorganization of the business segments allows us to more effectively serve our customers and compete in our industry. The following discussion provides a description of each of the three segments:

Device Solutions - includes hardware products used for measurement, control, or sensing that do not have communications capability embedded for use with our broader Itron systems, i.e., products where Itron is not offering the complete "end-to-end" solution, but only the hardware elements. Examples of the Device Solutions portfolio include basic meters that are shipped without Itron communications, such as our standard gas meters, electricity IEC meters, and water meters, in addition to our heat and allocation products; communicating meters that are not a part of an Itron solution such as the Linky meter; and the implementation and installation of non-communicating devices, such as gas regulators.

Networked Solutions - includes a combination of communicating devices (smart meters, modules, endpoints, and sensors), network infrastructure, and associated application software designed and sold as a complete solution for acquiring and transporting robust application-specific data. Networked Solutions combines, into one operating segment, the majority of the assets from the recently acquired SSNI organization with our legacy Itron networking products and software and the implementation and installation of communicating devices into one segment. This includes: communicating measurement, control, or sensing endpoints such as our Itron® and OpenWay® Riva meters, Itron traditional ERT® technology, Intelis smart gas or water meters, 500G gas communication modules, 500W water communication modules; GenX networking products, network modules and interface cards; and specific network

control and management software applications. Solutions supported by this segment include automated meter reading (AMR), advanced metering infrastructure (AMI), smart grid and distribution automation (DA), and smart street lighting and smart city solutions.

Outcomes - includes our value-added, enhanced software and services operating segment in which we manage, organize, analyze, and interpret data to improve decision making, maximize operational profitability, drive resource efficiency, and deliver results for consumers, utilities, and smart cities. Outcomes places an emphasis on delivering to Itron customers high-value, turn-key, digital experiences by leveraging the footprint of our Device Solutions and Networked Solutions segments. The revenues from these offerings are primarily recurring in nature and would include any direct management of Device Solutions, Networked Solutions, and other products on behalf of our end customers. Examples of these offerings include our meter data management and analytics offerings; our managed service solutions including network-as-a-service and platform-as-a-service, forecasting software and services; and any consulting-based engagement. Within the Outcomes segment, we also identify new business models, including performance-based contracting, to drive broader portfolio offerings across utilities and cities.

Table of Contents

Bookings and Backlog of Orders

Bookings for a reported period represent customer contracts and purchase orders received during the period for hardware, software, and services that have met certain conditions, such as regulatory and/or contractual approval. Total backlog represents committed but undelivered products and services for contracts and purchase orders at period-end. Twelve-month backlog represents the portion of total backlog that we estimate will be recognized as revenue over the next 12 months. Backlog is not a complete measure of our future revenues as we also receive significant book-and-ship orders, as well as frame contracts. Bookings and backlog may fluctuate significantly due to the timing of large project awards. In addition, annual or multi-year contracts are subject to rescheduling and cancellation by customers due to the long-term nature of the contracts. Beginning total backlog, plus bookings, minus revenues, will not equal ending total backlog due to miscellaneous contract adjustments, foreign currency fluctuations, and other factors. Total bookings and backlog include certain contracts with termination for convenience clause, which will not agree to the total transaction price allocated to remaining performance obligations disclosed in Item 8: "Financial Statements and Supplementary Data, Note 18: Revenues".

Year Ended Total Total Backlog 12-Month Backlog Bookings

(in millions)

December 31, 2018 \$2,515 \$ 3,173 \$ 1,349 December 31, 2017 1,993 1,750 931 December 31, 2016 2,066 1,652 761

Sales and Distribution

We use a combination of direct and indirect sales channels in our operating segments. A direct sales force is utilized for large electric, natural gas, and water utilities, with which we have long-established relationships. For smaller utilities, we typically use an indirect sales force that consists of distributors, sales representatives, partners, and meter manufacturer representatives.

No single customer represented more than 10% of total revenues for the years ended December 31, 2018, 2017, and 2016. Our 10 largest customers in each of the years ended December 31, 2018, 2017, and 2016, accounted for approximately 31%, 33%, and 31% of total revenues, respectively. *Manufacturing*

Our products require a wide variety of components and materials, which are subject to price and supply fluctuations. We enter into standard purchase orders in the ordinary course of business, which can include purchase orders for specific quantities based on market prices, as well as open-ended agreements that provide for estimated quantities over an extended shipment period, typically up to one year at an established unit cost. Although we have multiple sources of supply for many of our material requirements, certain components and raw materials are supplied by limited or sole-source vendors, and our ability to perform certain contracts depends on the availability of these materials. Refer to Item 1A: "Risk Factors," for further discussion related to supply risks.

Our manufacturing facilities are located throughout the world, an overview of which is presented in Item 2: "Properties". While we manufacture and assemble a portion of our products, we outsource the manufacturing of certain products to various manufacturing partners. This approach allows us to reduce our costs as it reduces our manufacturing overhead and inventory and also allows us to adjust more quickly to changing end-customer demand. These partners assemble our products using design specifications, quality assurance programs, and standards that we establish and procure components and assemble our products based on demand forecasts. These forecasts represent our estimates of future demand for our products based upon historical trends and analysis from our sales and product

management functions, as adjusted for overall market conditions.

Partners

In connection with delivering products and systems to our customers, we may partner with third-party vendors to provide hardware, software, or services, e.g., meter installation and communication network equipment and infrastructure. Our ability to perform on our contractual obligations with our customers is dependent on these partners meeting their obligations to us. Refer to Item 1A: "Risk Factors," for further discussion related to third-party vendors and strategic partners.

Table of Contents

Product Development

Our product development is focused on both improving existing technology and developing innovative new technology for electricity, natural gas, water and heat meters, sensing and control devices, data collection software, communication technologies, data warehousing, software applications, and the Industrial Internet of Things. We invested approximately \$208 million, \$169 million, and \$168 million in product development in 2018, 2017 and 2016, which represented 9% of total revenues for 2018, 8% of total revenues for 2017 and 2016.

Workforce

As of December 31, 2018, we had approximately 8,000 people in our workforce, including 6,700 permanent employees. We have not experienced significant employee work stoppages and consider our employee relations to be good.

Competition

We enable utilities and cities to safely, securely, and reliably deliver critical infrastructure services to communities in more than 100 countries. Our portfolio of smart networks, software, services, meters, and sensors help our customers better manage electricity, gas, water, and city infrastructure resources for the people they serve. Consequently, we operate within a large and complex competitive landscape. Some of our competitors have diversified product portfolios and participate in multiple geographic markets, while others focus on specific regional markets and/or certain types of products, including some low-cost suppliers based in China and India. Our competitors in China have an increasing presence in other markets around the world; however, excluding the Asia Pacific region this competition does not represent a major market share in our global operating regions. Our competitors range from small to large established companies.

We believe that our competitive advantage is based on our in-depth knowledge of the industries we serve, our capacity to innovate, and our ability to provide complete end-to-end integrated solutions. We are a global leader in the Industrial Internet of Things category, a leader the industry in communication modules deployed, a leading industry innovator, a leader in electricity, gas and water end-to-end solutions, and a global leader in meters under managed services. We continue to serve our established customer relationships, and expand upon our track record of delivering reliable, accurate, and long-lived products and services. Refer to Item 1A: "Risk Factors" for a discussion of the competitive pressures we face.

Our primary competitors include the following:

Global Competitors

Aclara (Hubbell Inc.)

AT&T (a)

Cisco Systems Inc. (a)

Diehl Metering (Diehl Stiftung & Co. KG) Elster (Honeywell International Inc.)

Hexing Electrical Co. Ltd

Landis+Gyr

Sensus (Xylem, Inc.)

Verizon Communications Inc. (a)

Vodafone Group PLC (a)

Zenner Performance (Zenner International GmbH & Co. KG)

Regional Competitors

Apator Badger Meter

Endesa (Enel SpA)

Kamstrup Water Metering L.L.C.

LAO Industria

Master Meter (ARAD, Ltd.)

Mueller Water Products

Neptune Technologies (Roper Technologies, Inc.)

Pietro Fiorentini

Sagemcom Energy & Telecom (Charterhouse Capital Partners)

(a) Due to the fragmented nature of the Industrial Internet of Things and Smart Cities markets, we often partner with these vendors to collaboratively deliver end-to-end solutions to our customers.

Strategic Alliances

We pursue strategic alliances with other companies in areas where collaboration can produce product advancement and acceleration of entry into new markets. The objectives and goals of a strategic alliance can include one or more of the following: technology exchange, product development, joint sales and marketing, or access to new geographic markets. Refer to Item 1A: "Risk Factors" for a discussion of risks associated with strategic alliances.

Table of Contents

Intellectual Property

Our patents and patent applications cover a range of technologies, which relate to standard metering, smart metering solutions and technology, meter data management software, knowledge application solutions, and Industrial Internet of Things. We also rely on a combination of copyrights, patents, and trade secrets to protect our products and technologies. Disputes over the ownership, registration, and enforcement of intellectual property rights arise in the ordinary course of our business. While we believe patents and trademarks are important to our operations and, in aggregate, constitute valuable assets, no single patent or trademark, or group of patents or trademarks, is critical to the success of our business. We license some of our technology to other companies, some of which are our competitors. *Environmental Regulations*

In the ordinary course of our business we use metals, solvents, and similar materials that are stored on-site. We believe that we are in compliance with environmental laws, rules, and regulations applicable to the operation of our business.

Table of Contents

EXECUTIVE OFFICERS

Set forth below are the names, ages, and titles of our executive officers as of February 28, 2019.

Name	Age	Position
Philip C. Mezey	59	President and Chief Executive Officer
Thomas L. Deitrich	52	Executive Vice President and Chief Operating Officer
Joan S. Hooper	61	Senior Vice President and Chief Financial Officer
Michel C. Cadieux	61	Senior Vice President, Human Resources
Sarah E. Hlavinka	54	Senior Vice President, General Counsel and Corporate Secretary

Philip C. Mezey is President and Chief Executive Officer and a member of our Board of Directors. Mr. Mezey was appointed to his current position and to the Board of Directors in January 2013. Mr. Mezey joined Itron in March 2003, and in 2007 Mr. Mezey became Senior Vice President and Chief Operating Officer, Itron North America. Mr. Mezey served as President and Chief Operating Officer, Energy from March 2011 through December 2012. On January 22, 2019, Mr. Mezey informed the Itron Board of his intention to retire from his positions. By mutual agreement with the Board, Mr. Mezey will continue to lead Itron as President and Chief Executive Officer and serve as a member of its Board of Directors until August 31, 2019. or until a successor is appointed. Upon the appointment of a successor, Mr. Mezey will remain with Itron, Inc. as an advisor through December 31, 2019, to help facilitate a seamless transition.

Thomas L. Deitrich is Executive Vice President and Chief Operating Officer. Mr. Deitrich joined Itron in October 2015. From 2012 to September 2015, Mr. Deitrich was Senior Vice President and General Manager for Digital Networking at Freescale Semiconductor, Inc. (Freescale), and he served as the Senior Vice President and General Manager of Freescale's RF, Analog, Sensor, and Cellular Products Group from 2009 to 2012. Mr. Deitrich had other roles of increasing responsibility at Freescale from 2006 to 2009. Prior to Freescale, Mr. Deitrich worked for Flextronics, Sony-Ericsson/Ericsson, and GE.

Joan S. Hooper is Senior Vice President and Chief Financial Officer. Ms. Hooper was appointed to this role in June 2017. Prior to joining Itron, Ms. Hooper was Chief Financial Officer of CHC Helicopter from 2011 to July 2015. Following Ms. Hooper's departure from CHC, CHC filed a voluntary petition of relief under Chapter 11 of the U.S. Bankruptcy Code in May 2016, and CHC emerged from bankruptcy in March 2017. Prior to CHC, she held several finance executive positions at Dell, Inc. from 2003 to 2010, including Vice President and Chief Financial Officer for its Global Public and Americas business units, Vice President of Corporate Finance and Chief Accounting Officer.

Michel C. Cadieux is Senior Vice President, Human Resources and has been so since joining Itron in February 2014. From 2008 to 2012, Mr. Cadieux was Senior Vice President of Human Resources and Security at Freescale Semiconductor, Inc. (Freescale). Mr. Cadieux has more than 30 years leading HR organizations in global technology and manufacturing companies including Betz Laboratories, the Hudson Bay Company, ING Bank of Canada, Advanced Micro Devices/ATI, and Freescale.

Sarah E. Hlavinka is Senior Vice President, General Counsel and Corporate Secretary. Ms. Hlavinka was appointed to this role in August 2018. Prior to joining Itron, Ms. Hlavinka served as Executive Vice President, General Counsel and Secretary at Xerox Corporation from 2017 to 2018. Prior to Xerox Corporation, Ms. Hlavinka was Executive Vice President, General Counsel and Secretary at ABM Industries Incorporated, a leading provider of integrated facility services from 2007 to 2017.

Table of Contents

ITEM 1A: RISK FACTORS

We are dependent on the utility industry, which has experienced volatility in capital spending.

We derive the majority of our revenues from sales of products and services to utilities. Purchases of our products may be deferred as a result of many factors, including economic downturns, slowdowns in new residential and commercial construction, customers' access to capital upon acceptable terms, the timing and availability of government subsidies or other incentives, utility specific financial circumstances, mergers and acquisitions, regulatory decisions, weather conditions, and fluctuating interest rates. We have experienced, and may in the future experience, variability in operating results on an annual and a quarterly basis as a result of these factors.

We depend on our ability to develop competitive products.

Our future success will depend, in part, on our ability to continue to design and manufacture competitive products, and to enhance and sustain our existing products, keep pace with technological advances and changing customer requirements, gain international market acceptance, and manage other factors in the markets in which we sell our products. Product development will require continued investment in order to maintain our competitive position, and the periods in which we incur significant product development costs may drive variability in our quarterly results. We may not have the necessary capital, or access to capital at acceptable terms, to make these investments. We have made, and expect to continue to make, substantial investments in technology development. However, we may experience unforeseen problems in the development or performance of our technologies or products, which can prevent us from meeting our product development schedules. New products often require certifications or regulatory approvals before the products can be used and we cannot be certain that our new products will be approved in a timely manner. Finally, we may not achieve market acceptance of our new products and services.

We depend on certain key vendors, strategic partners, and other third parties.

Certain of our products, subassemblies, and system components including most of our circuit boards are procured from limited or sole sources. We cannot be certain that we will not experience operational difficulties with these sources, including reductions in the availability of production capacity, errors in complying with product specifications, insufficient quality control, failures to meet production deadlines, increases in manufacturing costs, vendors' access to capital and increased lead times. Additionally, our manufacturers may experience disruptions in their manufacturing operations due to equipment breakdowns, labor strikes or shortages, natural disasters, component or material shortages, cost increases or other similar problems. Further, in order to minimize their inventory risk, our manufacturers might not order components from third-party suppliers with adequate lead time, thereby impacting our ability to meet our demand forecast. Therefore, if we fail to manage our relationship with our manufacturers effectively, or if they experience operational difficulties, our ability to ship products to our customers and distributors could be impaired and our competitive position and reputation could be harmed. In the event that we receive shipments of products that fail to comply with our technical specifications or that fail to conform to our quality control standards, and we are not able to obtain replacement products in a timely manner, we risk revenue losses from the inability to sell those products, increased administrative and shipping costs, and lower profitability. Additionally, if defects are not discovered until after consumers purchase our products, they could lose confidence in the technical attributes of our products and our business could be harmed. Although arrangements with these partners may contain provisions for warranty expense reimbursement, we may remain responsible to the consumer for warranty service in the event of product defects and could experience an unanticipated product defect or warranty liability. While we rely on partners to adhere to its supplier code of conduct, material violations of the supplier code of conduct could occur.

Delays in the availability of or shortages in raw materials and component parts used in the manufacture of our products could unfavorably impact our revenues and results of operations.

We are impacted by the availability and prices of raw materials and component parts used in the manufacturing process of our products. The inability to obtain adequate supplies of raw materials and component parts at favorable prices could have a material adverse effect on our business, financial condition, or results of operations by reducing revenue, decreasing profit margins, and by unfavorably impacting timely deliveries to customers, which could result in damages or penalties to be paid under the terms of some of the contracts with our customers. Since we do not control the actual production of these raw materials and component parts, there may be delays caused by an interruption in the production or transportation of these materials for reasons that are beyond our control. World commodity markets, inflation, and tariffs may also affect raw material and component part prices.

Table of Contents

Utility industry sales cycles can be lengthy and unpredictable.

The utility industry is subject to substantial government regulation. Regulations have often influenced the frequency of meter replacements. Sales cycles for standalone meter products have typically been based on annual or biennial bid-based agreements. Utilities place purchase orders against these agreements as their inventories decline, which can create fluctuations in our sales volumes.

Sales cycles for smart metering solutions are generally long and unpredictable due to several factors, including budgeting, purchasing, and regulatory approval processes that can take several years to complete. Our utility customers typically issue requests for quotes and proposals, establish evaluation processes, review different technical options with vendors, analyze performance and cost/benefit justifications, and perform a regulatory review, in addition to applying the normal budget approval process. Today, governments around the world are implementing new laws and regulations to promote increased energy efficiency, slow or reverse growth in the consumption of scarce resources, reduce carbon dioxide emissions, and protect the environment. Many of the legislative and regulatory initiatives encourage utilities to develop a smart grid infrastructure, and some of these initiatives provide for government subsidies, grants, or other incentives to utilities and other participants in their industry to promote transition to smart grid technologies. If government regulations regarding the smart grid and smart metering are delayed, revised to permit lower or different investment levels in metering infrastructure, or terminated altogether, this could have a material adverse effect on our results of operation, cash flow, and financial condition.

Our customer contracts are complex and contain provisions that could cause us to incur penalties, be liable for damages, and/or incur unanticipated expenses with respect to the functionality, deployment, operation, and availability of our products and services.

In addition to the risk of unanticipated warranty or recall expenses, our customer contracts may contain provisions that could cause us to incur penalties, be liable for damages, including liquidated damages, or incur other expenses if we experience difficulties with respect to the functionality, deployment, operation, and availability of our products and services. Some of these contracts contain long-term commitments to a set schedule of delivery or performance. If we failed in our estimated schedule or we fail in our management of the project, this may cause delays in completion. In the event of late deliveries, late or improper installations or operations, failure to meet product or performance specifications or other product defects, or interruptions or delays in our managed service offerings, our customer contracts may expose us to penalties, liquidated damages, and other liabilities. In the event we were to incur contractual penalties, such as liquidated damages or other related costs that exceed our expectations, our business, financial condition, and operating results could be materially and adversely affected. Further, we could be required to recognize a current-period reduction of revenue related to a specific component of a customer contract at the time we determine the products and/or services to be delivered under that component would result in a loss due to expected revenues estimated to be less than expected costs. Depending on the amounts of the associated revenues (if any) and the costs, this charge could be material to our results of operations in the period it is recognized.

We face increasing competition.

We face competitive pressures from a variety of companies in each of the markets we serve. Some of our present and potential future competitors have, or may have, substantially greater financial, marketing, technical, or manufacturing resources and, in some cases, have greater name recognition, customer relationships, and experience. Some competitors may enter markets we serve and sell products at lower prices in order to gain or grow market share. Our competitors may be able to respond more quickly to new or emerging technologies and changes in customer requirements. They may also be able to devote greater resources to the development, promotion, and sale of their products and services than we can. Some competitors have made, and others may make, strategic acquisitions or establish cooperative relationships among themselves or with third parties that enhance their ability to address the

needs of our prospective customers. It is possible that new competitors or alliances among current and new competitors may emerge and rapidly gain significant market share. Other companies may also drive technological innovation and develop products that are equal in quality and performance or superior to our products, which could put pressure on our market position, reduce our overall sales, and require us to invest additional funds in new technology development. In addition, there is a risk that low-cost providers will expand their presence in our markets, improve their quality, or form alliances or cooperative relationships with our competitors, thereby contributing to future price erosion. Some of our products and services may become commoditized, and we may have to adjust the prices of some of our products to stay competitive. Further, some utilities may purchase meters separately from the communication devices. The specifications for such meters may require interchangeability, which could lead to further commoditization of the meter, driving prices lower and reducing margins. Should we fail to compete successfully with current or future competitors, we could experience material adverse effects on our business, financial condition, results of operations, and cash flows.

Table of Contents

Our current and expected level and terms of indebtedness could adversely affect our ability to raise additional capital to fund our operations and take advantage of new business opportunities and prevent us from meeting our obligations under our debt instruments, and our ability to service our indebtedness is dependent on our ability to generate cash, which is influenced by many factors beyond our control.

In December 2017, we issued \$300 million aggregate principal amount of 5.00% senior notes due 2026 (December Notes). The December Notes were issued pursuant to an indenture, dated as of December 22, 2017 (Indenture), among Itron, the guarantors from time to time party thereto and U.S. Bank National Association, as trustee. In January 2018, we issued an additional \$100 million aggregate principal amount of 5.00% senior notes due 2026 pursuant to the Indenture (January Notes; collectively with the December Notes, the Senior Notes). Proceeds from the Senior Notes were used to finance the Silver Spring Networks, Inc. (SSNI) acquisition, refinance existing indebtedness related to the SSNI acquisition, pay related fees and expenses, and for general corporate purposes.

Also in January 2018, we entered into a credit agreement providing for committed credit facilities in the amount of \$1.15 billion (the 2018 credit facility). The 2018 credit facility consists of a U.S. dollar term loan in the amount of \$650 million and a multicurrency revolving credit facility in the committed amount of \$500 million.

This substantial indebtedness could have important consequences to us, including:

increasing our vulnerability to general economic and industry conditions;

requiring a substantial portion of our cash flow used in operations to be dedicated to the payment of principal and interest on our indebtedness, therefore reducing our liquidity and our ability to use our cash flow to fund our operations, capital expenditures and future business opportunities;

exposing us to the risk of increased interest rates, and corresponding increased interest expense, as borrowings under the 2018 credit facility would be at variable rates of interest;

limiting our ability to obtain additional financing for working capital, capital expenditures, debt service requirements, acquisitions, and general corporate or other purposes; and

limiting our ability to adjust to changing marketplace conditions and placing us at a competitive disadvantage compared with our competitors who may have less debt.

Our ability to make scheduled payments on and to refinance our indebtedness depends on, and is subject to, our financial and operating performance, which is influenced, in part, by general economic, financial, competitive, legislative, regulatory, counterparty business, and other risks that are beyond our control, including the availability of financing in the U.S. banking and capital markets. We cannot assure you that our business will generate sufficient cash flow from operations or that future borrowings will be available to us in an amount sufficient to enable us to service our debt to refinance our debt or to fund our other liquidity needs on commercially reasonable terms or at all. If we are unable to meet our debt service obligations or to fund our other liquidity needs, we will need to restructure or refinance all or a portion of our debt which could cause us to default on our debt obligations and impair our liquidity. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition at such time. Even if refinancing indebtedness is available, any refinancing of our indebtedness could be at higher interest rates and may require us to comply with more onerous covenants that could further restrict our business operations.

Moreover, in the event of a default under any of our indebtedness the holders of the defaulted debt could elect to declare all the funds borrowed to be due and payable, together with accrued and unpaid interest, which in turn could result in cross defaults under our other indebtedness. The lenders under the 2018 credit facility could also elect to terminate their commitments thereunder and cease making further loans, and such lenders could institute foreclosure proceedings against their collateral, and we could be forced into bankruptcy or liquidation. If we breach our covenants under the 2018 credit facility, we would be in default thereunder. Such lenders could exercise their rights, as described above, and we could be forced into bankruptcy or liquidation.

Our variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.

The 2018 credit facility will bear, and other indebtedness we may incur in the future may bear, interest at a variable rate. As a result, at any given time interest rates on the 2018 credit facility and any other variable rate debt could be higher or lower than current levels. If interest rates increase, our debt service obligations on our variable rate indebtedness may increase even though the amount borrowed remains the same, and therefore net income and associated cash flows, including cash available for servicing our indebtedness, may correspondingly decrease. While we continually monitor and assess our interest rate risk and have entered

Table of Contents

into derivative instruments to manage such risk, these instruments could be ineffective at mitigating all or a part of our risk, including changes to the applicable margin under our 2018 credit facility.

Our 2018 credit facility and Senior Notes limit our ability and the ability of many of our subsidiaries to take certain actions.

Our 2018 credit facility and Senior Notes place restrictions on our ability, and the ability of many of our subsidiaries, dependent on meeting specified financial ratios, to, among other things:

incur more debt;

- pay dividends, make distributions, and repurchase capital stock;
- make certain investments:
- create liens:
- enter into transactions with affiliates; enter into sale lease-back transactions;
- merge or consolidate;
- transfer or sell assets.

Our 2018 credit facility contains other customary covenants, including the requirement to meet specified financial ratios and provide periodic financial reporting. Our ability to borrow will depend on the satisfaction of these covenants. Events beyond our control can affect our ability to meet those covenants. Our failure to comply with obligations under our borrowing arrangements may result in declaration of an event of default. An event of default, if not cured or waived, may permit acceleration of required payments against such indebtedness. We cannot be certain we will be able to remedy any such defaults. If our required payments are accelerated, we cannot be certain that we will have sufficient funds available to pay the indebtedness or that we will have the ability to raise sufficient capital to replace the indebtedness on terms favorable to us or at all. In addition, in the case of an event of default under our secured indebtedness such as our 2018 credit facility, the lenders may be permitted to foreclose on our assets securing that indebtedness. As a result of these restrictions, we will be limited as to how we conduct our business and we may be unable to raise additional debt or equity financing to compete effectively or to take advantage of new business opportunities. The terms of any future indebtedness we may incur could include more restrictive covenants. We cannot assure you that we will be able to maintain compliance with these covenants in the future and, if we fail to do so that we will be able to obtain waivers from the lenders and/or amend the covenants.

Despite our current level of indebtedness, we may be able to incur substantially more debt and enter into other transactions which could further exacerbate the risks to our financial condition described above.

We may be able to incur significant additional indebtedness in the future. Although the credit agreement that currently governs our 2018 credit facility, the Senior Notes, and other debt instruments contain restrictions on the incurrence of additional indebtedness and entering into certain types of other transactions, these restrictions are subject to a number of qualifications and exceptions. Additional indebtedness incurred in compliance with these restrictions could be substantial. These restrictions also do not prevent us from incurring obligations, such as certain trade payables that do not constitute indebtedness as defined under our debt instruments. To the extent we incur additional indebtedness or other obligations, the risks described in the immediately preceding risk factor and others described herein may increase.

Our acquisitions of and investments in third parties have risks.

We have recently completed acquisitions and may make investments in the future, both within and outside of the United States, Acquisitions and investments involve numerous risks such as the diversion of senior management's attention; unsuccessful integration of the acquired entity's personnel, operations, technologies, and products; incurrence of significant expenses to meet an acquiree's customer contractual commitments; lack of market acceptance of new services and technologies; or difficulties in operating businesses in international legal jurisdictions. Failure to adequately address these issues could result in the diversion of resources and adversely impact our ability to manage

our business. In addition, acquisitions and investments in third parties may involve the assumption of obligations, significant write-offs, or other charges associated with the acquisition. Impairment of an investment, goodwill, or an intangible asset may result if these risks were to materialize. For investments in entities that are not wholly owned by Itron, such as joint ventures, a loss of control as defined by U.S. generally accepted accounting principles (GAAP) could result in a significant change in accounting treatment and a change in the carrying value of the entity. There can be no assurances that an acquired business will perform as expected, accomplish our strategic objectives, or generate significant revenues, profits, or cash flows.

Table of Contents

We may face adverse publicity, consumer or political opposition, or liability associated with our products.

The safety and security of the power grid and natural gas and water supply systems, the accuracy and protection of the data collected by meters and transmitted via the smart grid, concerns about the safety and perceived health risks of using radio frequency communications, and privacy concerns of monitoring home appliance energy usage have been the focus of recent adverse publicity. Unfavorable publicity and consumer opposition may cause utilities or their regulators to delay or modify planned smart grid initiatives. Smart grid projects may be, or may be perceived as, unsuccessful.

Our products are complex and may contain defects or experience failures due to any number of issues in design, materials, deployment, and/or use. If any of our products contain a defect, a compatibility or interoperability issue, or other types of errors, we may have to devote significant time and resources to identify and correct the issue. We provide product warranties for varying lengths of time and establish allowances in anticipation of warranty expenses. In addition, we recognize contingent liabilities for additional product-failure related costs. These warranty and related product-failure allowances may be inadequate due to product defects and unanticipated component failures, as well as higher than anticipated material, labor, and other costs we may incur to replace projected product failures. A product recall or a significant number of product returns could be expensive; damage our reputation and relationships with utilities, meter and communication vendors, and other third-party vendors; result in the loss of business to competitors; or result in litigation. We may incur additional warranty expenses in the future with respect to new or established products, which could materially and adversely affect our operations and financial position.

We may be subject to claims that there are adverse health effects from the radio frequencies utilized in connection with our products. If these claims prevail, our customers could suspend implementation or purchase substitute products, which could cause a loss of sales.

Changes in tax laws, valuation allowances, and unanticipated tax liabilities could adversely affect our effective income tax rate and profitability.

We are subject to income tax in the United States and numerous foreign jurisdictions. Significant judgment is required in evaluating our tax positions and determining our provision for income taxes. During the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. We establish reserves for tax-related uncertainties based on estimates of whether, and the extent to which, additional taxes will be due. These reserves may be established when we believe that certain positions might be challenged despite our belief that our tax return positions are fully supportable. We adjust these reserves in light of changing facts and circumstances. The provision for income taxes includes the impact of reserve positions and changes to reserves that are considered appropriate, as well as valuation allowances when we determine it is more likely than not that a deferred tax asset cannot be realized. In addition, future changes in tax laws in the jurisdictions in which we operate could have a material impact on our effective income tax rate and profitability. We regularly assess all of these matters to determine the adequacy of our tax provision, which is subject to significant judgment.

The Organization for Economic Cooperation and Development guidance under the Base Erosion and Profit Shifting (BEPS) initiatives aim to minimize perceived tax abuses and modernize global tax policy. The Anti-Tax Avoidance Directives (ATAD), issued by the Council of the European Union, provide further recommendations for legislative changes under these tax policies. More countries are beginning to implement legislative changes based on these BEPS recommendations and ATAD measures.

On December 22, 2017, the United States enacted comprehensive tax reform commonly referred to as the Tax Cuts and Jobs Act (Tax Act). The Tax Act makes significant changes to the way the U.S. taxes corporations. Clarifying proposed Treasury regulations have been issued during 2018, many late in the year, for which we are continuing to

evaluate the impact on our business. In addition, a number of U.S. states have not yet updated their laws to take into account the new federal legislation. As a result, there may be further impacts of the new law on our results of operations. It is possible that U.S. tax reform, or interpretations provided, could change and could have an adverse effect on us, and such effect could be material.

Table of Contents

Disruption and turmoil in global credit and financial markets, which may be exacerbated by the inability of certain countries to continue to service their sovereign debt obligations, and the possible unfavorable implications of such events for the global economy, may unfavorably impact our business, liquidity, operating results, and financial condition.

The current economic conditions, including volatility in the availability of credit and foreign exchange rates and extended economic slowdowns, have contributed to the instability in some global credit and financial markets. Additionally, at-risk financial institutions in certain countries may, without forewarning, seize a portion of depositors' account balances. The seized funds would be used to recapitalize the at-risk financial institution and would no longer be available for the depositors' use. If such seizure were to occur at financial institutions where we have funds on deposit, it could have a significant impact on our overall liquidity. While the ultimate outcome of these events cannot be predicted, it is possible that such events may have an unfavorable impact on the global economy and our business, liquidity, operating results, and financial condition.

We are subject to international business uncertainties, obstacles to the repatriation of earnings, and foreign currency fluctuations.

A substantial portion of our revenues is derived from operations conducted outside the United States. International sales and operations may be subjected to risks such as the imposition of government controls, government expropriation of facilities, lack of a well-established system of laws and enforcement of those laws, access to a legal system free of undue influence or corruption, political instability, terrorist activities, restrictions on the import or export of critical technology, currency exchange rate fluctuations, and adverse tax burdens. Lack of availability of qualified third-party financing, generally longer receivable collection periods than those commonly practiced in the United States, trade restrictions, changes in tariffs, labor disruptions, difficulties in staffing and managing international operations, difficulties in imposing and enforcing operational and financial controls at international locations, potential insolvency of international distributors, preference for local vendors, burdens of complying with different permitting standards and a wide variety of foreign laws, and obstacles to the repatriation of earnings and cash all present additional risk to our international operations. Fluctuations in the value of international currencies may impact our operating results due to the translation to the U.S. dollar as well as our ability to compete in international markets. International expansion and market acceptance depend on our ability to modify our technology to take into account such factors as the applicable regulatory and business environment, labor costs, and other economic conditions. In addition, the laws of certain countries do not protect our products or technologies in the same manner as the laws of the United States, Further, foreign regulations or restrictions, e.g., opposition from unions or works councils, could delay, limit, or disallow significant operating decisions made by our management, including decisions to exit certain businesses, close certain manufacturing locations, or other restructuring actions. There can be no assurance that these factors will not have a material adverse effect on our future international sales and, consequently, on our business, financial condition, and results of operations.

We may engage in future restructuring activities and incur additional charges in our efforts to improve profitability. We also may not achieve the anticipated savings and benefits from current or any future restructuring projects.

We have implemented multiple restructuring projects to adjust our cost structure, and we may engage in similar restructuring activities in the future. These restructuring activities reduce our available employee talent, assets, and other resources, which could slow product development, impact ability to respond to customers, increase quality issues, temporarily reduce manufacturing efficiencies, and limit our ability to increase production quickly. In addition, delays in implementing restructuring projects, unexpected costs, unfavorable negotiations with works councils, changes in governmental policies, or failure to meet targeted improvements could change the timing or reduce the overall savings realized from the restructuring project.

Business interruptions could adversely affect our business.

Our worldwide operations could be subject to hurricanes, tornadoes, earthquakes, floods, fires, extreme weather conditions, medical epidemics or pandemics, or other natural or man-made disasters or business interruptions. The occurrence of any of these business disruptions could seriously harm our business, financial condition, and results of operations.

Our key manufacturing facilities are concentrated, and in the event of a significant interruption in production at any of our manufacturing facilities, considerable expense, time, and effort could be required to establish alternative production lines to meet contractual obligations, which would have a material adverse effect on our business, financial condition, and results of operations.

We may encounter strikes or other labor disruptions that could adversely affect our financial condition and results of operations.

We have significant operations throughout the world. In a number of countries outside the U.S., our employees are covered by collective bargaining agreements. As the result of various corporate or operational actions, which our management has undertaken or may be made in the future, we could encounter labor disruptions. These disruptions may be subject to local media coverage, which could damage our reputation. Additionally, the disruptions could delay our ability to meet customer orders and could

Table of Contents

adversely affect our results of operations. Any labor disruptions could also have an impact on our other employees. Employee morale and productivity could suffer, and we may lose valued employees whom we wish to retain.

Asset impairment could result in significant changes that would adversely impact our future operating results.

We have significant inventory, intangible assets, long-lived assets, and goodwill that are susceptible to valuation adjustments as a result of changes in various factors or conditions, which could impact our results of operations or and financial condition. Factors that could trigger an impairment of such assets include the following:

*reduction in the net realizable value of inventory which becomes obsolete or exceeds anticipated demand; changes in our organization or management reporting structure, which could result in additional reporting units,

*requiring greater aggregation or disaggregation in our analysis by reporting unit and potentially alternative methods/assumptions of estimating fair values;

- underperformance relative to projected future operating results;
- changes in the manner or use of the acquired assets or the strategy for our overall business;
- unfavorable industry or economic trends; and
- decline in our stock price for a sustained period or decline in our market capitalization below net book value.

We are subject to a variety of litigation that could adversely affect our results of operations, financial condition, and cash flows.

From time to time, we are involved in litigation that arises from our business. In addition, parties to these lawsuits may bring claims against our customers, which, in some instances, could result in an indemnification of the customer by us. Litigation may also relate to, among other things, product failure or product liability claims, contractual disputes, employment matters, or securities litigation. Litigation can be expensive to defend and can divert the attention of management and other personnel for long periods of time, regardless of the ultimate outcome. We may be required to pay damage awards or settlements or become subject to equitable remedies that could adversely affect our financial condition and results of operations. While we currently maintain insurance coverage, such insurance may not provide adequate coverage against potential claims.

We may face losses associated with alleged unauthorized use of third-party intellectual property.

We may be subject to claims or inquiries regarding alleged unauthorized use of a third-party's intellectual property. An adverse outcome in any intellectual property litigation or negotiation could subject us to significant liabilities to third parties, require us to license technology or other intellectual property rights from others, require us to comply with injunctions to cease marketing or the use of certain products or brands, or require us to redesign, re-engineer, or rebrand certain products or packaging, any of which could affect our business, financial condition, and results of operations. If we are required to seek licenses under patents or other intellectual property rights of others, we may not be able to acquire these licenses at acceptable terms, if at all. In addition, the cost of responding to an intellectual property infringement claim, in terms of legal fees, expenses, and the diversion of management resources, whether or not the claim is valid, could have a material adverse effect on our business, financial condition, and results of operations.

If our products infringe the intellectual property rights of others, we may be required to indemnify our customers for any damages they suffer. We generally indemnify our customers with respect to infringement by our products of the proprietary rights of third parties. Third parties may assert infringement claims against our customers. These claims may require us to initiate or defend protracted and costly litigation on behalf of our customers, regardless of the merits of these claims. If any of these claims succeed, we may be forced to pay damages on behalf of our customers or may be required to obtain licenses for the products they use. If we cannot obtain all necessary licenses on commercially reasonable terms, our customers may be forced to stop using our products.

We are affected by the availability and regulation of radio spectrum and interference with the radio spectrum that we use.

A significant number of our products use radio spectrum, which are subject to regulation by the Federal Communications Commission (FCC) in the United States. The FCC may adopt changes to the rules for our licensed and unlicensed frequency bands that are incompatible with our business. In the past, the FCC has adopted changes to the requirements for equipment using radio spectrum, and it is possible that the FCC or the U.S. Congress will adopt additional changes.

Although radio licenses are generally required for radio stations, Part 15 of the FCC's rules permits certain low-power radio devices (Part 15 devices) to operate on an unlicensed basis. Part 15 devices are designed for use on frequencies used by others. These other users may include licensed users, which have priority over Part 15 users. Part 15 devices cannot cause harmful interference to licensed users and must be designed to accept interference from licensed radio devices. In the United States, our smart metering solutions are typically Part 15 devices that transmit information to (and receive information from, if applicable) handheld, mobile, or fixed network systems pursuant to these rules.

Table of Contents

We depend upon sufficient radio spectrum to be allocated by the FCC for our intended uses. As to the licensed frequencies, there is some risk that there may be insufficient available frequencies in some markets to sustain our planned operations. The unlicensed frequencies are available for a wide variety of uses and may not be entitled to protection from interference by other users who operate in accordance with FCC rules. The unlicensed frequencies are also often the subject of proposals to the FCC requesting a change in the rules under which such frequencies may be used. If the unlicensed frequencies become crowded to unacceptable levels, restrictive, or subject to changed rules governing their use, our business could be materially adversely affected.

We have committed, and will continue to commit, significant resources to the development of products that use particular radio frequencies. Action by the FCC could require modifications to our products. The inability to modify our products to meet such requirements, the possible delays in completing such modifications, and the cost of such modifications all could have a material adverse effect on our future business, financial condition, and results of operations.

Outside of the United States, certain of our products require the use of RF and are subject to regulations in those jurisdictions where we have deployed such equipment. In some jurisdictions, radio station licensees are generally required to operate a radio transmitter and such licenses may be granted for a fixed term and must be periodically renewed. In other jurisdictions, the rules permit certain low power devices to operate on an unlicensed basis. Our smart metering solutions typically transmit to (and receive information from, if applicable) handheld, mobile, or fixed network reading devices in license-exempt bands pursuant to rules regulating such use. In Europe, we generally use the 169 megahertz (MHz), 433/4 MHz, and 868 MHz bands. In the rest of the world, we primarily use the 433/4 MHz, 920 MHz and 2.4000-2.4835 gigahertz (GHz) bands, as well as other local license-exempt bands. To the extent we introduce new products designed for use in the United States or another country into a new market, such products may require significant modification or redesign in order to meet frequency requirements and other regulatory specifications. In some countries, limitations on frequency availability or the cost of making necessary modifications may preclude us from selling our products in those countries. In addition, new consumer products may create interference with the performance of our products, which could lead to claims against us.

We may be unable to adequately protect our intellectual property.

While we believe that our patents and other intellectual property have significant value, it is uncertain that this intellectual property or any intellectual property acquired or developed by us in the future will provide meaningful competitive advantages. There can be no assurance that our patents or pending applications will not be challenged, invalidated, or circumvented by competitors or that rights granted thereunder will provide meaningful proprietary protection. Moreover, competitors may infringe our patents or successfully avoid them through design innovation. To combat infringement or unauthorized use of our intellectual property, we may need to commence litigation, which can be expensive and time-consuming. In addition, in an infringement proceeding a court may decide that a patent or other intellectual property right of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology or other intellectual property right at issue on the grounds that it is non-infringing or the legal requirements for an injunction have not been met. Policing unauthorized use of our intellectual property is difficult and expensive, and we cannot provide assurance that we will be able to prevent misappropriation of our proprietary rights, particularly in countries that do not protect such rights in the same manner as in the United States.

We have pension benefit obligations, which could have a material impact on our earnings, liabilities, and shareholders' equity and could have significant adverse impacts in future periods.

We sponsor both funded and unfunded defined benefit pension plans for our international employees, primarily in Germany, France, Italy, Indonesia, Brazil, and Spain. Our general funding policy for these qualified pension plans is

to contribute amounts sufficient to satisfy regulatory funding standards of the respective countries for each plan.

The determination of pension plan expense, benefit obligation, and future contributions depends heavily on market factors such as the discount rate and the actual return on plan assets. We estimate pension plan expense, benefit obligation, and future contributions to these plans using assumptions with respect to these and other items. Changes to those assumptions could have a significant effect on future contributions as well as on our annual pension costs and/or result in a significant change to shareholders' equity.

A number of key personnel are critical to the success of our business.

Our success depends in large part on the efforts of our highly qualified technical and management personnel and highly skilled individuals in all disciplines. The loss of one or more of these employees and the inability to attract and retain qualified replacements could have a material adverse effect on our business.

Table of Contents

If we are unable to protect our information technology infrastructure and network against data corruption, cyber-based attacks or network security breaches, we could be exposed to customer liability and reputational risk.

We rely on various information technology systems to capture, process, store, and report data and interact with customers, vendors, and employees. Despite security steps we have taken to secure all information and transactions, our information technology systems, and those of our third-party providers, may be subject to cyber attacks. Any data breaches could result in misappropriation of data or disruption of operations. In addition, hardware and operating system software and applications that we procure from third parties may contain defects in design or manufacture that could interfere with the operation of the systems. Misuse of internal applications; theft of intellectual property, trade secrets, or other corporate assets; and inappropriate disclosure of confidential information could stem from such incidents.

In addition, we have designed products and services that connect to and are part of the Industrial Internet of Things. While we attempt to provide adequate security measures to safeguard our products from cyber attacks, the potential for an attack remains. A successful attack may result in inappropriate access to information or an inability for our products to function properly.

Any such operational disruption and/or misappropriation of information could result in lost sales, unfavorable publicity, or business delays and could have a material adverse effect on our business.

We may not realize the expected benefits from strategic alliances.

We have several strategic alliances with large and complex organizations and other companies with which we work to offer complementary products and services. There can be no assurance we will realize the expected benefits from these strategic alliances. If successful, these relationships may be mutually beneficial and result in shared growth. However, alliances carry an element of risk because, in most cases, we must both compete and collaborate with the same company from one market to the next. Should our strategic partnerships fail to perform, we could experience delays in product development or experience other operational difficulties.

We rely on information technology systems.

Our industry requires the continued operation of sophisticated information technology systems and network infrastructures, which may be subject to disruptions arising from events that are beyond our control. We are dependent on information technology systems, including, but not limited to, networks, applications, and outsourced services. We continually enhance and implement new systems and processes throughout our global operations.

We offer managed services and software utilizing several data center facilities located worldwide. Any damage to, or failure of, these systems could result in interruptions in the services we provide to our utility customers. As we continue to add capacity to our existing and future data centers, we may move or transfer data. Despite precautions taken during this process, any delayed or unsuccessful data transfers may impair the delivery of our services to our utility customers. We also sell vending and pre-payment systems with security features that, if compromised, may lead to claims against us.

We are completing a phased upgrade of our primary enterprise resource planning (ERP) systems to allow for greater depth and breadth of functionality worldwide. System conversions are expensive and time consuming undertakings that impact all areas for us. While successful implementations of each phase will provide many benefits to us, an unsuccessful or delayed implementation of any particular phase may cost us significant time and resources.

The failure of these systems to operate effectively, problems with transitioning to upgraded or replacement systems, or a breach in security of these systems due to computer viruses, hacking, acts of terrorism, and other causes could materially and adversely affect our business, financial condition, and results of operations by harming our ability to accurately forecast sales demand, manage our supply chain and production facilities, achieve accuracy in the conversion of electronic data and records, and report financial and management information on a timely and accurate basis. In addition, due to the systemic internal control features within ERP systems, we may experience difficulties that could affect our internal control over financial reporting.

Changes in environmental regulations, violations of such regulations, or future environmental liabilities could cause us to incur significant costs and could adversely affect our operations.